


ANNUAL REPORTS

1958-1967

S. C. STATE COMMISSION
OF FORESTRY



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STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1957 TO JUNE 30, 1958



CHARLES H. FLORY, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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*To Honorable George Bell Timmerman, Jr., Governor, and to
the General Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1957 to June 30, 1958.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,
Fulton B. Creech, *Chairman.*

PERSONNEL

S. C. STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1958.)

Members of the Commission

Fulton B. Creech, Chairman, Sumter, S. C.
 E. Craig Wall, Conway, S. C.
 Dr. R. F. Poole, President, Clemson College, Clemson, S. C.
 A. B. Taylor, Spartanburg, S. C.
 John C. Pracht, Greenwood, S. C.

Secretary of the Commission

Chas. H. Flory, State Forester

DIVISION OF STATE PARKS

C. West Jacobs, State Park Director
 T. D. Ravenel, Assistant State Park Director—Operations
 E. R. Vreeland, Assistant State Park Director—Operations

State Park Superintendents

Aiken State Park, Carl S. Foxworth, Supt., Windsor, S. C.
 Andrew Jackson Historical State Park, Cecil S. Hayes, Ranger, Route 1, Lancaster, S. C.
 Barnwell State Park, Mrs. D. I. Ross, Supt., Blackville, S. C.
 *Cheraw State Park, George T. Holder, Supt., Cheraw, S. C.
 Chester State Park, Clarence Doster, Supt., Chester, S. C.
 Croft State Park, J. E. Thornton, Ranger, Spartanburg, S. C.
 Edisto Beach State Park, Lewis S. Bailey, Supt., Edisto Island, S. C.
 Givhans Ferry State Park, Wm. Wiggins, Jr., Supt., Ridgeville, S. C.
 *Greenwood State Park, M. R. LeRoy, Supt., Ninety Six, S. C.
 *Hunting Island State Park, Norman B. Cooler, Supt., Frogmore, S. C.
 Kings Mountain State Park, Raymond M. Sisk, Supt., Kings Creek, S. C.
 Lee State Park, Van W. Pressley, Supt., Bishopville, S. C.
 Little Pee Dee State Park, LaFon Norton, Supt., Dillon, S. C.
 Myrtle Beach State Park, T. F. Barbie, Jr., Supt., Myrtle Beach, S. C.
 Oconee State Park, James W. Ray, Supt., Walhalla, S. C.

Paris Mountain State Park, Ed. H. Miller, Supt., Greenville, S. C.

*Pleasant Ridge State Park, LeRoy Smith, Ranger, Cleveland, S. C.

*Poinsett State Park, F. Marion Dwight, Supt., Wedgefield, S. C.

Rivers Bridge State Park, E. B. Mobley, Supt., Ehrhardt, S. C.

Santee State Park, G. B. LaBoon, Supt., Santee, S. C.

Sesqui-Centennial State Park, Marshall D. Holder, Supt., Columbia, S. C.

Table Rock State Park, R. G. Jones, Supt., Pickens, S. C.

Colleton Wayside Park, Willard Risher, Caretaker, Canadys, S. C.

* Includes area for Negroes.

State Park Advisory Committee

Mrs. Bradley Morrah, Sr.	Spartanburg, S. C.
212 Overbrook Road	Mr. Harry R. E. Hampton
Greenville, S. C.	c/o The State
Mrs. R. K. Wise	Stadium Road
1709 Hollywood Drive	Columbia, S. C.
Columbia, S. C.	Mr. J. D. Carroll
Mrs. Jack Bryant	Lexington, S. C.
Orangeburg, S. C.	Mr. Harold Petit
Dr. V. F. Platt	Box 952
Conway, S. C.	Charleston, S. C.
Mr. Wayne Freeman	Mr. Cecil McDaniel
c/o Greenville News	Beaufort, S. C.
Greenville, S. C.	Mr. Bennett Moore
Mr. Tom Moore Craig	Cheraw, S. C.
Montgomery Bldg.	

DIVISION OF FORESTRY

Branch of Administration

E. B. Price, Assistant State Forester

C. H. Nelson, Head, Fiscal and Accounting

Delford F. Furney, Head, Property and Supply

Virginia S. Holmes, Head, Personnel and Office Services

Warehouse, Sumter, S. C.

J. P. Watson, Warehouseman

Branch of Information and Education

Walter T. Ahearn, Assistant State Forester

Claude F. Barden, Information and Education Assistant

Nelson L. Peach, Information and Education Assistant

Sign and Woodworking Shop, Sumter, S. C.

Olin M. Ballentine, Foreman

Branch of Forest Management

E. C. Pickens, Assistant State Forester

A. A. Lehocky, Management Assistant

Howard R. Scott, Management Assistant

E. L. Middleswart, Management Assistant

Sand Hills State Forest, Patrick, S. C.

Randolph B. Lee, Director

Manchester State Forest, Wedgefield, S. C.

C. W. Nuite, Director

Horace L. Tilghman Nursery, Wedgefield, S. C.

L. M. Staley, Nurseryman

Piedmont Nursery, Pickens, S. C.

E. W. Cooler, Jr., Nurseryman

Coastal Nursery, St. George, S. C.

David D. Brown, Nurseryman

Branch of Forest Fire Control

John R. Tiller, Assistant State Forester

J. T. Hance, Fire Control Assistant

John M. Shirer, Fire Control Assistant

Hugh M. Westbury, Fire Control Assistant

J. M. Geddings, Communications Engineer-Telephone

R. M. Littlejohn, Communications Engineer-Radio

Equipment and Repair Shop, Sumter, S. C.

O. P. Woodward, Supervising Mechanic

District Offices

Chauncey R. Nichols, District Forester, Camden, S. C.

R. B. Rhett, Forester, Camden, S. C.

Daniel D. Riddick, Forester, Camden, S. C.

W. O. Morgan, District Ranger, Camden, S. C.

D. R. Young, Forestry Aide, Camden, S. C.

(Camden District includes counties of: Chesterfield, Ker-
shaw, Lancaster, Lee, Richland, and Sumter)

Alvin E. Kunz, District Forester, Florence, S. C.

Kenneth G. Clemens, Forester, Florence, S. C.

John R. Allison, Forester, Conway, S. C.

Robert N. McCombs, Forester, Florence, S. C.

Jack F. Young, Forester, Bennettsville, S. C.

D. M. Handley, Forester, Florence, S. C.

Fred W. Watson, Jr., District Ranger, Florence, S. C.

Malcolm B. Wright, Forestry Aide, Florence, S. C.

(Florence District includes counties of: Darlington, Dillon,
Florence, Horry, Marion, and Marlboro)

Fred W. Horn, District Forester, Kingstree, S. C.

Robert J. Gould, Forester, Kingstree, S. C.

John R. Grubbs, District Ranger, Kingstree, S. C.

James Richard Todd, Forestry Aide, Kingstree, S. C.

(Kingstree District includes counties of: Berkeley, Clarendon,
Georgetown, and Williamsburg)

John E. Graham, District Forester, Newberry, S. C.

Donald W. Horton, Forester, Greenwood, S. C.

Phil A. Hadaway, Jr., Forester, Newberry, S. C.

Wilbur H. Reames, Forester, Newberry, S. C.

Clifton T. Carter, Timber Marker, Chester, S. C.

Melton Wall, District Ranger, Newberry, S. C.

Walter W. Senn, Forestry Aide, Newberry, S. C.

(Newberry District includes counties of: Abbeville, Chester,
Edgefield, Fairfield, Greenwood, Laurens, McCormick,
Newberry, and Saluda)

Marvin T. Gaffney, District Forester, Orangeburg, S. C.

Robert C. Simmons, Forester, Orangeburg, S. C.

C. C. Canada, Forester, Lexington, S. C.

C. W. Haynes, Forester, Orangeburg, S. C.

Chas. C. Rountree, Jr., Forester, Orangeburg, S. C.

Adrian Lee Pardue, District Ranger, Aiken, S. C.

(Orangeburg District includes counties of: Aiken, Allendale,
Bamberg, Barnwell, Calhoun, Lexington, and Orangeburg)

W. M. Lindsey, District Forester, Spartanburg, S. C.

Ralph W. Evans, Forester, Pickens, S. C.

J. Harlan McLees, Forester, Spartanburg, S. C.

Legare M. Duke, Forester, Spartanburg, S. C.

Joe Frank Manning, Forester, Walhalla, S. C.

Chas. E. Turpin, District Ranger, Spartanburg, S. C.

(Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union, and York)

Boris Hurlbutt, District Forester, Walterboro, S. C.

Paul B. Carson, Forester, Walterboro, S. C.

Arthur P. Jervy, Forester, Walterboro, S. C.

E. H. Benton, District Ranger, Walterboro, S. C.

W. C. Polk, Forestry Aide, Walterboro, S. C.

(Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton, and Jasper)

Protection Units

Abbeville Unit Ranger, Charlie Shaw, Lowndesville, S. C.

Aiken Unit Ranger, J. Ramie Yonce, Aiken, S. C.

Allendale Unit Ranger, W. W. Brunson, Allendale, S. C.

Anderson Unit Ranger, John E. Embler, Anderson, S. C.

Bamberg Unit Ranger, P. H. Cave, Olar, S. C.

Barnwell Unit Ranger, W. R. Moore, Barnwell, S. C.

Beaufort Unit Ranger, W. Heyward Graves, Beaufort, S. C.

Berkeley Unit Ranger, C. L. Wyndham, Moncks Corner, S. C.

Calhoun Unit Ranger, Hampie F. Ott, St. Matthews, S. C.

Charleston Unit Ranger, K. W. Leland, Charleston, S. C.

Cherokee Unit Ranger, B. T. White, Gaffney, S. C.

Chester Unit Ranger, J. Gill Simpson, Chester, S. C.

Chesterfield Unit Ranger, W. M. Smith, Chesterfield, S. C.

Clarendon Unit Ranger, Elliott E. Rose, Manning, S. C.

Colleton Unit Ranger, Glenn B. Britt, Walterboro, S. C.

Darlington Unit Ranger, Alton Yarborough, Darlington, S. C.

Dillon Unit Ranger, Ernest S. Oliver, Dillon, S. C.

Dorchester Unit Ranger, Carlisle Haskell Durr, St. George, S. C.

Edgefield Unit Ranger, S. G. Reel, Edgefield, S. C.

Fairfield Unit Ranger, R. E. Patrick, Winnsboro, S. C.

Florence Unit Ranger, Hugh Cusaac, Florence, S. C.

Georgetown Unit Ranger, Laurin T. Sessions, Georgetown, S. C.

Greenville Unit Ranger, G. G. Paris, Greenville, S. C.

Greenwood Unit Ranger, James C. Smith, Jr., Greenwood, S. C.

Hampton Unit Ranger, J. D. Peeples, Early Branch, S. C.

Horry Unit Ranger, W. E. Watts, Conway, S. C.

Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland, S. C.

Kershaw Unit Ranger, L. E. Smith, Camden, S. C.

Lancaster Unit Ranger, A. A. Plyler, Lancaster, S. C.
 Laurens Unit Ranger, Thos. F. Hill, Laurens, S. C.
 Lee Unit Ranger, E. A. Hall, Bishopville, S. C.
 Lexington Unit Ranger, V. S. Bickley, Lexington, S. C.
 Marion Unit Ranger, Hoyt Collins, Marion, S. C.
 Marlboro Unit Ranger, B. T. Clark, Bennettsville, S. C.
 McCormick Unit Ranger, G. L. Sharpton, McCormick, S. C.
 Newberry Unit Ranger, Marvin E. Wilson, Newberry, S. C.
 Oconee Unit Ranger, D. O. Morgan, Walhalla, S. C.
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg, S. C.
 Pickens Unit Ranger, C. H. Gravely, Pickens, S. C.
 Richland Unit Ranger, T. W. Cooper, Columbia, S. C.
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda, S. C.
 Spartanburg Unit Ranger, Milton E. McMillin, Spartanburg,
 S. C.
 Sumter Unit Ranger, L. G. Cubbage, Sumter, S. C.
 Union Unit Ranger, James G. Long, Union, S. C.
 Williamsburg Unit Ranger, F. W. Faurey, Jr., Kingstree, S. C.
 York Unit Ranger, E. G. Foster, York, S. C.

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 Mr. Charles G. Youngblood, Box 114, Barnwell, S. C.

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 Mr. Ernie Bell, Bluffton, S. C.

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 Mr. Ansel Alewine, Taylors, S. C.
 Mr. M. L. Jarrard, Cleveland, S. C.

Greenwood—

Mr. E. W. Milford, Greenwood, S. C.
 Mr. John Bowen, Troy, S. C.
 Mr. A. C. Byrd, c/o Abney Mills, Greenwood, S. C.
 Mr. J. McD. Kinard, Ninety Six, S. C.
 Mr. Eldred S. Tinsley, Hodges, S. C.

Hampton—

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 Mr. Vernon C. Sauls, Hampton, S. C.
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 Mr. Howard P. Rhodes, Estill, S. C.
 Mr. Lloyd Rivers, Hampton, S. C.

Horry—

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 Mr. Allard Strickland, Rt. 1, Loris, S. C.
 Mr. Fred Lancaster, Tabor City, N. C.
 Mr. Hicks Huggins, Rt. 4, Nichols, S. C.

Jasper—

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 Mr. George Roberts, Pineland, S. C.
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 Mr. J. Hoyt Langford, Ridgeland, S. C.

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 Mr. C. W. Wooten, Blaney, S. C.
 Mr. Richard W. Lloyd, 1707 Lyttleton St., Camden, S. C.
 Mr. John Bowers, Kershaw, S. C.
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Mr. Harold Richardson, Rt. 1, Lancaster, S. C.
 Mr. Carl W. Mullis, Lancaster, S. C.

Mr. W. G. Hance, Heath Springs, S. C.
 Mr. Charlie V. Morris, RFD, Lancaster, S. C.
 Mr. Frank Blackwell, Rt. 2, Jefferson, S. C.

Laurens—

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 Mr. J. Y. Martin, Ware Shoals, S. C.
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 Mr. Elmore G. Bramlett, RFD, Laurens, S. C.

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 Mr. E. L. Joyner, RFD, Bishopville, S. C.
 Mr. Clifton Atkinson, St. Charles, S. C.
 Mr. R. V. Segars, RFD, Oswego, S. C.

Lexington—

Mr. Harper Shull, West Columbia, S. C.
 Mr. Berley V. Shealy, Leesville, S. C.
 Mr. Preston G. Freshley, Rt. 2, Columbia, S. C.
 Mr. L. O. Rast, Swansea, S. C.
 Mr. J. D. Carroll, Lexington, S. C.

Marion—

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 Mr. B. B. Baker, Centenary, S. C.
 Mr. A. M. Flowers, Marion, S. C.
 Mr. T. C. Atkinson, Rt. 1, Mullins, S. C.

Marlboro—

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 Mr. R. M. Pegues, Rt. 4, Bennettsville, S. C.
 Mr. C. D. Napier, Blenheim, S. C.
 Mr. J. Richard Bryant, Rt. 1, Clio, S. C.
 Mr. Brooks Usher, Bennettsville, S. C.

McCormick—

Mr. J. T. Crewswell, Rt. 3, McCormick, S. C.
 Mr. W. L. White, Rt. 2, McCormick, S. C.
 Mr. J. C. Winn, Plum Branch, S. C.
 Mr. J. M. Hemminger, Willington, S. C.
 Mr. G. J. Sanders, McCormick, S. C.

Newberry—

Mr. Chas. C. Wallace, Rt. 3, Newberry, S. C.
 Mr. H. M. Hentz, Box 181, Newberry, S. C.
 Mr. A. W. Murray, Newberry, S. C.
 Mr. T. J. Abrams, Whitmire, S. C.
 Mr. J. Cecil Berly, Pomaria, S. C.

Oconee—

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 Mr. B. W. Alexander, Westminster, S. C.
 Mr. Oscar Wigington, Salem, S. C.
 Mr. W. H. Pelfrey, Rt. 2, Seneca, S. C.
 Mr. Henry Miller, Westminster, S. C.

Orangeburg—

Mr. George H. Priester, Neeses, S. C.
 Mr. J. Nat Miley, Branchville, S. C.
 Mr. M. H. Whetsell, Orangeburg, S. C.
 Mr. L. E. Miller, Holly Hill, S. C.
 Mr. Martin Cope, Cope, S. C.

Pickens—

Mr. W. M. Ponder, Dacusville, S. C.
 Mr. L. P. Thomas, Rt. 5, Box 237, Easley, S. C.
 Mr. J. H. Bolding, Rt. 2, Pickens, S. C.
 Mr. T. J. Mitchell, Pickens, S. C.
 Mr. T. A. Bowen, Pickens, S. C.

Richland—

Mr. Lonnie B. Nelson, Rt. 3, Columbia, S. C.
 Mr. J. Roger Wilson, Blythewood, S. C.
 Mr. E. B. Wingard, 3042 Broad River Rd., Columbia, S. C.
 Mr. L. W. Conder, Box 693, Columbia, S. C.
 Mr. J. M. Bates, Wateree, S. C.

Saluda—

Mr. M. H. Kemp, Johnston, S. C.
 Mr. C. M. Forrest, Johnston, S. C.
 Mr. J. Claude Wheeler, Saluda, S. C.
 Mr. R. L. Hipp, Saluda, S. C.
 Mr. A. R. Able, Saluda, S. C.

Spartanburg—

Mr. Tom Craig, Moore, S. C.
 Mr. Paul Hendrix, Duncan, S. C.

Mr. W. J. Martin, P.O. Bldg., Spartanburg, S. C.
 Mr. Claude Bishop, Inman, S. C.
 Mr. Sam Snoddy, Wellford, S. C.

Sumter—

Mr. M. S. Boykin, Sumter, S. C.
 Mr. Hugh M. McLaurin, Jr., Wedgefield, S. C.
 Mr. Curtis Edens, Dalzell, S. C.
 Mr. Albert Moore, Rt. 1, Olanta, S. C.
 Mr. H. Fox Tindal, Pinewood, S. C.

Union—

Mr. James A. Berry, Union, S. C.
 Mr. T. Stokes Adams, Union, S. C.
 Mr. A. T. Inabinett, Buffalo, S. C.
 Mr. C. Lynell Gregory, Rt. 1, Buffalo, S. C.
 Mr. Seth Garner, Rt. 4, Union, S. C.

Williamsburg—

Mr. J. W. Waldron, Nesmith, S. C.
 Mr. P. D. Bishop, Kingstree, S. C.
 Mr. T. E. Salters, Salters, S. C.
 Mr. Jack McFaddin, Cades, S. C.
 Mr. T. V. Ligon, Lanes, S. C.

York—

Mr. John M. Foster, York, S. C.
 Mr. Oliver C. Faris, Catawba, S. C.
 Mr. Sewell Hartness, Sharon, S. C.
 Mr. Oscar Hammond, Fort Mill, S. C.
 Mr. R. S. Flanagan, Bowling Green, S. C.

FOREST FIRE PROTECTION

SUMMARY

South Carolina experienced below normal fire occurrence and acreage burned from forest fires during the fiscal year 1957-58. The vast majority of fires and area burned occurred during the winter and early spring months, which is considered normal for the state. Seventy-two percent of the total number of fires and eighty-six percent of the total area burned occurred during the months of December, January, February, March, and April.

During the fiscal year 1957-58, a total of 2,590 fires burned 20,253.0 acres of forest land. The area burned represents 0.18% of the total forest area under protection. The average area burned per fire was 7.8 acres.

These figures represent the lowest number of fires and the least acreage burned ever experienced for the entire state since statewide fire protection was established in 1946. Smokers, debris burning, and incendiarism continued as the major causes of all illegal fires.

The total rainfall for South Carolina during the fiscal year was 55.18 inches or 7.93 inches above normal. This figure represents an increase of 12.03 inches over the previous fiscal year. These favorable weather conditions contributed much to the good fire record for the year. Although favorable weather conditions contributed materially to the good fire record, other factors must be recognized such as the fact that fire control personnel are more experienced in fire suppression tactics and are better qualified to handle the job; availability of more and better fire suppression tools and mechanized equipment; an effective radio communications system; and the fact that generally timberland owners are becoming more fire conscious and are cooperating with the Commission in its efforts to reduce fire losses to a minimum in the state.

INTRODUCTION

The Forest Fire Control Organization of the South Carolina State Commission of Forestry provides intensive forest fire protection to all timberland owners in South Carolina on a cooperative basis. The private landowners cooperate with the Commission of Forestry in the prevention and control of fires on their

timberlands. The total area of these lands comprises 11,300,008 acres. The U. S. Forest Service protects a total of 587,221 acres within the national forest boundaries in the state. Other federal agencies own and protect approximately 58,100 acres. These federal lands are not included in the state statistics mentioned above. The administration of all forest fire protection activities is supervised by the Central Fire Control Branch in Columbia. The state is subdivided into seven (7) forest service districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district. The districts are divided into county units, all of which have fire control organizations which work directly with private landowners in the prevention and control of fires on their timberland. Even though the Commission renders protection service whenever and wherever possible, the landowner is not relieved of the responsibility for fires on his property.

County Units:

Forest fire protection work in each county unit is supervised by the individual unit rangers, who are responsible to the district forester. The unit ranger is assisted by unit wardens, towermen, tractor operators, and flexible crews—all of which make up a standard county unit organization.

A total of 380 persons was employed for fire protection and suppression work in the county units during the fiscal year. This number includes 46 rangers, 134 wardens, 63 tractor operators, and 137 towermen. A total of 7,497 persons volunteered their assistance to the regular unit organization in fire suppression work throughout the state.

County Forestry Boards:

Each county in the state has a County Forestry Board consisting of five members who are appointed by the State Commission of Forestry upon the recommendations of a majority of the County Legislative Delegation in the House of Representatives and the Senator. The members are appointed for a five-year term each member holding office until his successor is appointed. All members are residents of the county from which they are appointed. The County Forestry Boards assist in the effective performance of the requirements of the Forest Fire Protection Act and the general conduct of the forestry program within the

county. Annual meetings are held with the County Forestry Boards in July. At these meetings, the fire protection activities in the county are reviewed and discussed along with the plans for the forthcoming year. The individual Forestry Board members are recognized forestry leaders within their respective counties and have assisted materially in the effective coordination of all fire protection activities within the state. Forestry Board members serve without pay and willingly assist the State Commission of Forestry in carrying out its forestry program.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards is composed of one delegate from each County Board elected by the membership of the Board or appointed by the Board Chairman. The State Committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry, including forest fire control, forest management, reforestation, and information and education. This Committee meets annually to discuss the proposed action programs of the S. C. State Commission of Forestry for the forthcoming fiscal year and also considers the budget request that is to be submitted to the State Legislature. The Committee is designed to study in detail all activities of the Commission of Forestry and to make recommendations concerned with improving the over-all efficiency of all phases of the work.

State Forests and Parks:

The Branch of Fire Control cooperates very closely with the individual State Forest Directors and State Park Superintendents in the prevention and suppression of woods fires on these state-owned lands. The state-owned forests and parks of South Carolina comprise approximately 169,574 acres.

Cooperative Agreements with U. S. Forest Service:

The U. S. Forest Service and the Commission of Forestry have mutually agreed to assist one another with the detection and suppression of fires which occur along either side of the national forest boundaries. In accordance with these agreements, the Commission of Forestry furnishes protection to such areas within the national forest boundaries in those localities where most of the lands are privately owned. In other areas within the national forest boundaries where the majority of the property is federally owned, the U. S. Forest Service assumes responsibility for pro-

tection of certain areas which normally would fall under the responsibility of the State Commission of Forestry. These agreements greatly increase the over-all efficiency of the suppression efforts of both organizations.

FIRE PROTECTION ACTIVITIES

Training:

The training program carried out by all personnel is one of the necessary and valuable phases of the Fire Control Organization. Each member of the organization must be thoroughly trained in order that the fire protection activities can be properly and efficiently carried out. The vast majority of the training this year was conducted on a local basis, with emphasis on training the individual for the job for which he is responsible. Individual and on-the-job training was given all employees by their immediate supervisor throughout the year. At the regular weekly ranger-warden meetings, training was a regular part of the meeting, along with preparation of weekly work plans and routine work. Each week during this meeting, the ranger gives some timely prepared training to his men, either individually or as a unit. District office personnel regularly attend these meetings and give supplemental training to the unit or to the individuals.

In early October, a series of two-day district training meetings for forestry and cooperator personnel was held on law enforcement. These meetings were held by the South Carolina State Law Enforcement Division with the assistance of the University of South Carolina, the Attorney General's Office, Sheriffs' Offices, City Police, and members of the Central Office Fire Control staff. Instructions included analysis of forest fire laws, note taking, crime scene search, interrogation, confessions, testifying in court, records, etc.

Training is one of the most important jobs of unit rangers and other supervisory personnel. The continuous training program designed and tailored for the individual results in improved performance of all phases of fire control activities.

Inspection:

The unit inspection program is designed to determine the discrepancies of the entire unit protection activities in order that a more effective training program may be carried out. These inspections are conducted primarily by district office personnel.

Immediately after each inspection has been conducted, a detailed report is prepared, outlining the general condition of the county and pointing out necessary measures which are needed in order to bring all activities up to prescribed standards.

In addition to the regular unit inspections, periodic motor vehicle inspections are conducted by the traveling mechanics. The purpose of these mechanical inspections is to determine the mechanical condition of the equipment and initiate steps to keep the equipment in a good state of maintenance and repair.

Fire Control Progress Checks:

The purpose of the district fire control progress checks is to make a complete inspection of the fire control work being carried out in the districts so that training and other corrective measures can be taken for the parts of the work that are not up to the desired standards. The progress checks are conducted by members of the Central Fire Control staff.

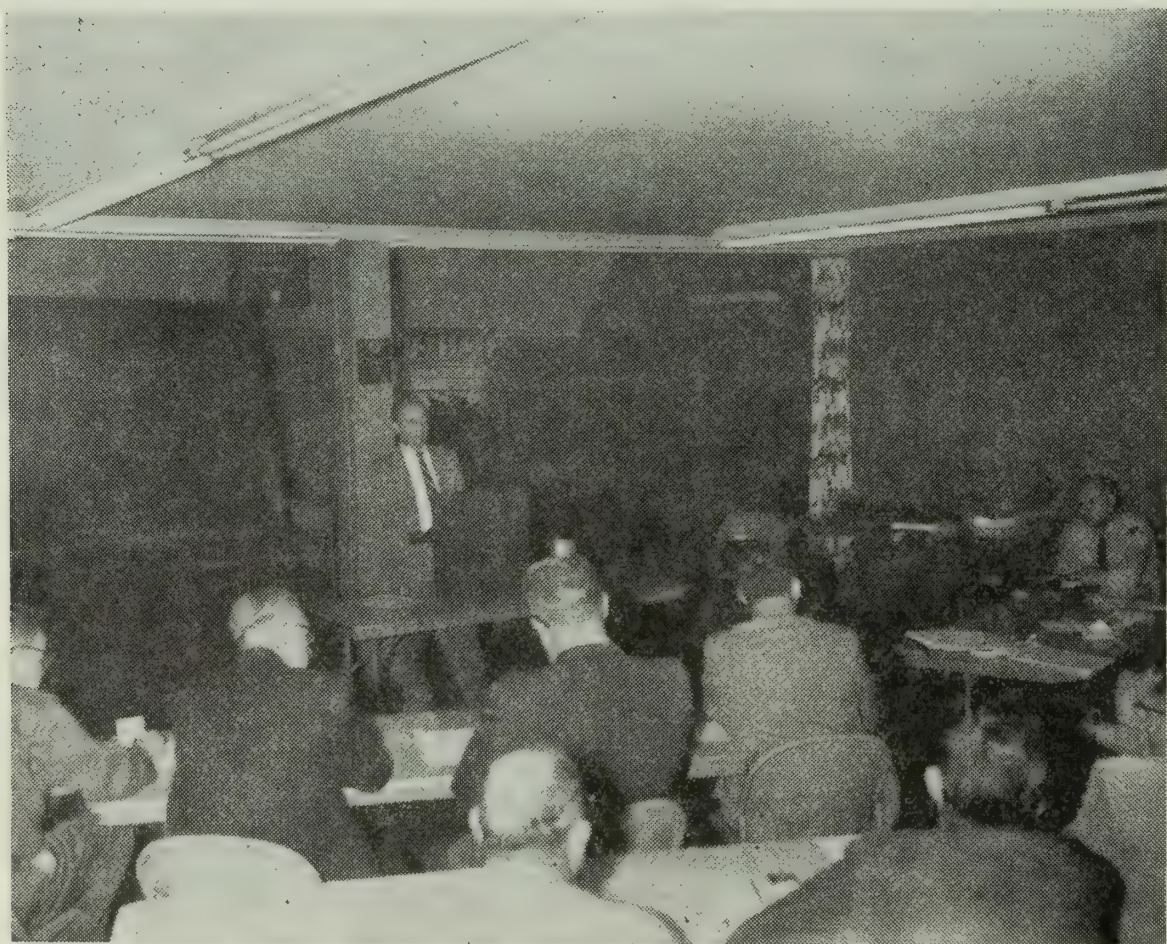
Fire control progress checks were completed in the Walterboro and Spartanburg Districts during the year. With the completion of these two districts, progress checks have now been made in all of the seven districts of the state. Immediately following the fire control progress check, a detailed report of the findings is written and given to the district forester. These progress checks have resulted in a better understanding of the job to be done and have increased the efficiency and progress of the fire control work throughout the state.

Law Enforcement:

The investigation and prosecution of forest fire law violations are among the most difficult breeds of law violations to ferret out and convict the person responsible. Convictions in the past based on anything but circumstantial evidence are negligible. Material evidence, except for occasional plaster casts of tire or footprints, is rare. All other physical evidence is most usually destroyed by the fire itself or by the manpower and equipment used in suppression, little of which can be controlled. In these cases, the person responsible was determined only after incessant questioning and cross questioning of people in the vicinity who were possible witnesses or suspects. These matters are brought out, not as an indication that convictions are impossible, but to point out the complexity of the problem and that much time is involved in the investigation and handling of each case.

There are two courses of action, both necessary, which may be taken in an effort to reduce fire incidence to an acceptable minimum: (a) a strong, sustained fire prevention education program; and (b) a strong law enforcement program. Of the two, the educational program will reach the many—the enforcement program, the few. It is, in the long run, the fire prevention program which will bring about and sustain the desired reduction in fire incidence. The enforcement program will serve to hold in check the relative few who, for whatever reason, negligently or maliciously set fire to woodlands of another.

The Forestry Commission's policy has always been that all forest fires declared illegal will be investigated as to origin, cause, and person responsible; and that whenever the person responsible can be determined and sufficient evidence secured, that person will be prosecuted by the Commission in the name of the state.



Training is an important part of the Commission's fire control program. Here, Assistant Attorney General Muller Kreps holds an instruction class on forest fire law enforcement.

On July 1, 1957, in accordance with recommendations of the Forestry Study Committee and approval of the Legislature, the State Law Enforcement Division organized a Forest Arson Squad. As organized, it consisted of two Agents, Kenneth Brown and Rochelle Boyle. Brown served in this capacity until January, 1958—Boyle serving by himself for the remainder of the year, assisted from time to time by other Agents.

During the summer of 1957, the Agents contacted the district offices and rangers to acquaint themselves with the forestry personnel and the forest fire problem. During October, the Agents held a series of two-day district training meetings for forestry and cooperator personnel with personnel of the University of South Carolina, Attorney General's Office, Sheriffs' Offices, City Police, etc., participating as instructors. Instruction included analysis of forest fire laws, note taking, crime scene search, interrogation, confessions, testifying in court, records, etc. Following the October training meetings, SLED Agents scheduled visits to several of the county fire control organizations at weekly or bi-weekly ranger-warden meetings for additional training.

The next phase of the cooperative effort between SLED and the Commission was in the field of actual investigation of forest fires and in prosecution of the resulting cases. The general pattern of fire law investigations and resulting prosecutions has been, over the years, directly proportionate to fire incidence—the more numerous the fires, the more cases prosecuted. During the past twenty years, one out of each twenty fires was successfully investigated and prosecuted. During the fiscal year 1957-58, with lower fire incidence and therefore more time for investigation, and with the assistance which was given by SLED and the Sheriffs of the several counties, one out of each sixteen fires was successfully prosecuted.

During the fiscal year 1957-58, a total of 159 persons was prosecuted for violation of the various state fire laws. Of this number, 148 were convicted.

The specific fire law prosecutions were as follows:

Section 16-317, Wilful and Malicious—7 prosecutions and 6 convictions.

Section 16-318, Careless or Negligent—118 prosecutions and 108 convictions.

Permit Laws—34 prosecutions and 34 convictions.

A total of 199 wilful and malicious fires was reported in the state in 1957-58. Law enforcement agencies assisted in the investigation of 126 of these malicious fires. Assistance in the investigations was as follows: Sled Agents 49, Sheriffs 60, and Other 17. Due to a complete lack of evidence on the other 73 malicious fires, no assistance from law enforcement agencies was requested.

The enforcement of any laws, the forest fire laws included, reflects directly the attitude, the will, and the desire of the general public. Far too many people still are against fire law enforcement on the basis that they feel fires do little or no damage. This again points up the need to greatly intensify the forest fire education program in an effort to arouse a sentiment among the general public which recognizes the true value of our forest resources to the economy of the landowners, the community, the county, and the state, and the damage done to it by uncontrolled woods fires. Only through such an attitude on the part of the public will the actions of the courts reflect a strong desire to protect the woodlands of the state from fires which are either negligently or maliciously set.

The Burning Permit Law or the Burning Notification Law, now in force in twelve counties, requires all persons to secure a permit, or notify, the county fire control organization or an authorized agent prior to burning brush, hedgerows, woodlands, or fields during October 15-May 15 of each year. These laws are very beneficial to the county organizations inasmuch as they supply information to the unit personnel as to the location and approximate time when burning is scheduled. The landowner is also given instructions regarding safe handling of his burning operation which naturally reduces the possibility of fires escaping. The counties with the Permit Laws are Aiken, Orangeburg, Georgetown, Charleston, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Burning Notification Laws are in effect in Colleton, Hampton, and Jasper Counties. During the fiscal year 1957-58, 14,414 permits or notifications were issued in these twelve counties. There were only 22 known fires that escaped from the 14,414 permits issued.

Fire Plans:

The unit fire plans have been revised in all counties except a few to conform with current conditions and operating proce-

dures. These fire plans outline in detailed form the procedures for the control and operation of fire suppression activities within a county unit organization.

A number of similar plans have been prepared for individual landowners or groups of landowners who have expressed a desire to intensify the protection efforts on their private holdings. These landowner fire plans are closely tied in with the activities of the local county unit organization and generally conform to the outline used for the standard unit fire plans.

Forestry Legislation:

The Legislature, during its 1958 session, amended Section 16-318 of the Code of Laws of 1952 so as to provide for increased penalties for carelessly or negligently burning the land of another, and to provide for stiffer penalties in second offense cases.

A Burning Notification Law for Jasper County was also enacted by the 1958 Legislature.

The Legislature also provided for the continuance of the Forestry Study Committee for another year.

The Legislature, during its 1958 session, again provided funds to the State Law Enforcement Division for the purpose of employing a special Law Enforcement Agent to be assigned to forest fire law enforcement work throughout the state.

Legislative Forestry Study Committee—Forest Fire Control:

Much progress has been made in the Commission's program of forest fire control since the inception of the Legislative Forestry Study Committee three years ago in 1955. Much of the Commission's accomplishments were in fields of forest fire control in which the Legislative Study Committee has made studies resulting in recommendations to the General Assembly. Among these are the following:

1. Amendment of Section 16-317 of the Code of Laws of 1952 so as to provide stiffer penalties for "wilfully allowing fire to spread to the lands of another," and to provide that violation of this Section is a felony rather than a misdemeanor.

2. Amendment to Section 16-318 of the Code of Laws of 1952 so as to provide for increased penalties for carelessly or negligently burning the lands of another, and to provide for stiffer penalties in second offense cases.

3. Creation of a Forest Arson Squad as a part of the South Carolina Law Enforcement Division to work with and assist the State Forestry Commission in the enforcement of the state fire laws of South Carolina, particularly those relating to forest arson.

4. The replacement of twelve wooden forest fire lookout towers by steel towers.

5. The purchase and assignment of additional medium type suppression units, particularly in the Piedmont section of the state so that at least one such medium suppression unit is located in each county in South Carolina.

6. Purchase and assignment of additional heavy type forest fire suppression units so that there is at least one such heavy suppression unit located in each forest service district of the state.

7. Full-time employment of heavy forest fire suppression unit operators has been granted in order that their duties might be expanded to include maintenance of forest fire control equipment.

8. Expansion is being undertaken in the field of forest fire research at Clemson College and by the experiment stations operated by the U. S. Forest Service, and

9. Intensification in other phases of the forest fire control program in order to bring about more efficient control of fires and, as a result, decrease area burned and resultant damage by destructive forest fires.

Southern States Fire Control Conference:

The nineteenth Southern States Fire Control Conference was held at Alexandria, Louisiana, in May of 1958. These annual meetings are designed to discuss fire control problems common to all of the Southern States and to formulate effective measures to increase the efficiency of the program on a region-wide basis. The meeting was attended by the various State Foresters and Fire Chiefs of the Southern States, along with representatives of the U. S. Forest Service.

Southeastern States Forest Fire Compact Commission:

The membership of the Southeastern States Forest Fire Compact Commission from each state is comprised of a Compact Ad-

ministrator (the State Forester) and a four-member advisory committee. The Advisory Committee of South Carolina is comprised of Senator L. Marion Gressette of Calhoun, Representative Don V. Richardson of Georgetown, representing our General Assembly, and Messrs. W. L. Rhodes of Estill and Richard Coker of Hartsville, appointed by the Governor. The governing body of the Compact Commission is a five-man executive committee, headed by a chairman. State Forester Chas. H. Flory was elected to this position and served for two years. The present Compact Chairman is State Forester Fred H. Claridge of North Carolina. In 1957, S. D. Beichler of the U. S. Forest Service, representing the Regional Forester's Office in Atlanta, was named Compact Coordinator and is responsible for maintaining liaison between the several states relative to the status of the fire situation, availability of fire control personnel and equipment, training, etc. Implementation of the Compact calls for the development of integrated forest fire plans, the maintenance of adequate fire fighting forces by Member States, provisions for mutual aid among Compacting States, and, generally, for more adequate fire protection.

A Forest Fire Manual for the Compact has been developed and approved. Plans for Compact training on large fire organization have been made and training on this topic will be given representatives of the fire control sections of the various Member States early in 1958.

The ten Southeastern States that have ratified the Compact Act and have now become members are Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

Civil Defense:

The two-way radio system of the S. C. Commission of Forestry is used as the second line of communications for the civil defense of South Carolina. The fire control personnel of the Commission of Forestry cooperate with the local Civil Defense Chairmen and the State Civil Defense Headquarters in relaying messages in connection with civil defense. The Commission participated in several of the Civil Defense Alerts during the year, and the radio network proved to be very successful in relaying the various civil defense messages that were required.

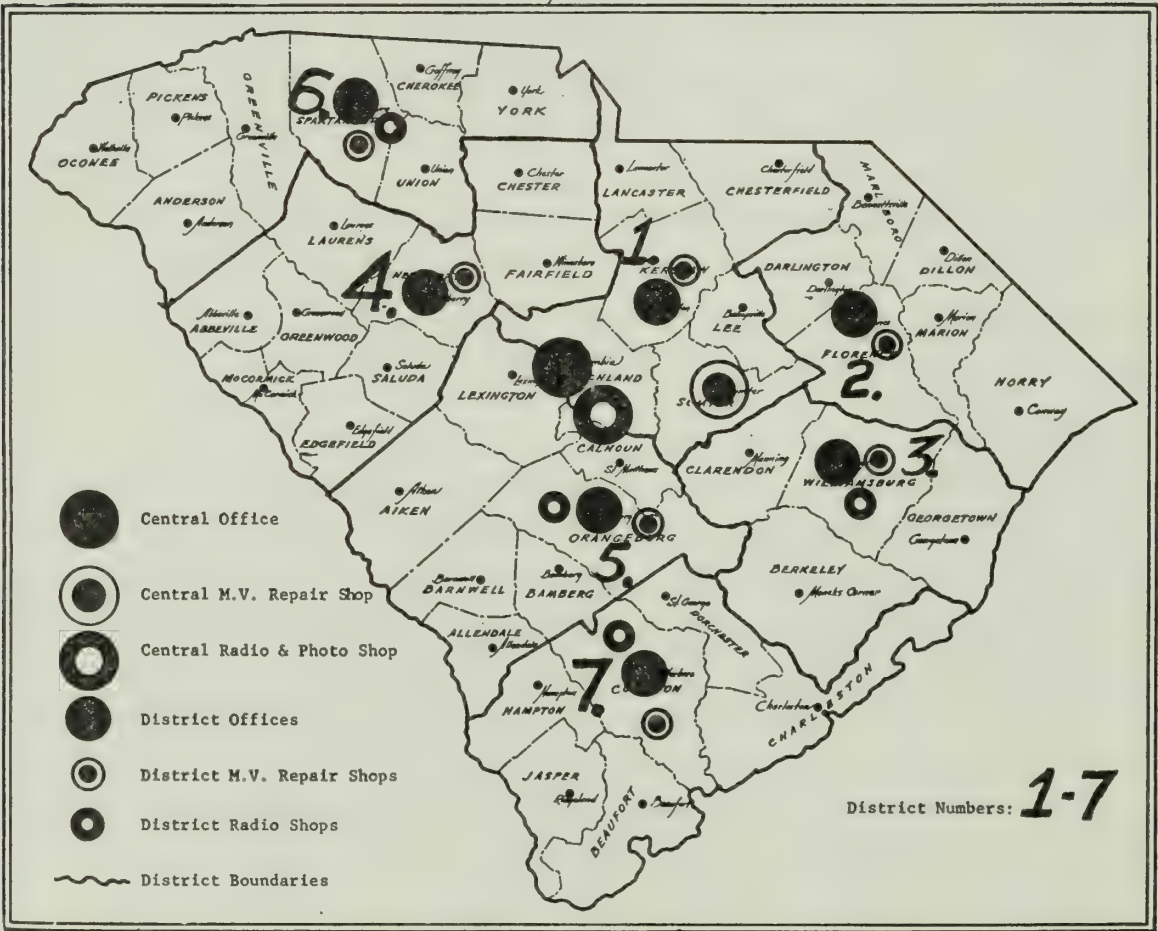
IMPROVEMENTS, TOOLS AND EQUIPMENT

Lookout Towers:

The Commission of Forestry operates 137 forest fire lookout towers in the state. During the year, six old wooden lookout towers located at Riverside in Fairfield County, Way in Orangeburg County, Mont Clare in Darlington County, Chester in Chester County, Simpson in Chester County, and White Oak in Fairfield County, were replaced with new steel structures. The 1958 General Assembly appropriated funds to construct a tower on Hilton Head Island which is to be erected during fiscal year 1958-59. In addition to the state-operated towers, the U. S. Forest Service owns and operates a number of lookout units on the Sumter and Francis Marion National Forests. All towermen, both state and federal, cooperate with one another in spotting and locating fires.

Tower Unit Buildings:

Limited progress was made during the year with the maintenance of tower unit dwellings and outbuildings owned by the



Commission. In most cases, Forestry personnel are capable and available to carry out maintenance work, however the program is hampered considerably due to lack of sufficient funds. Appropriations have never been made for the installation of sanitary facilities at tower dwellings. These facilities are badly needed throughout the state.

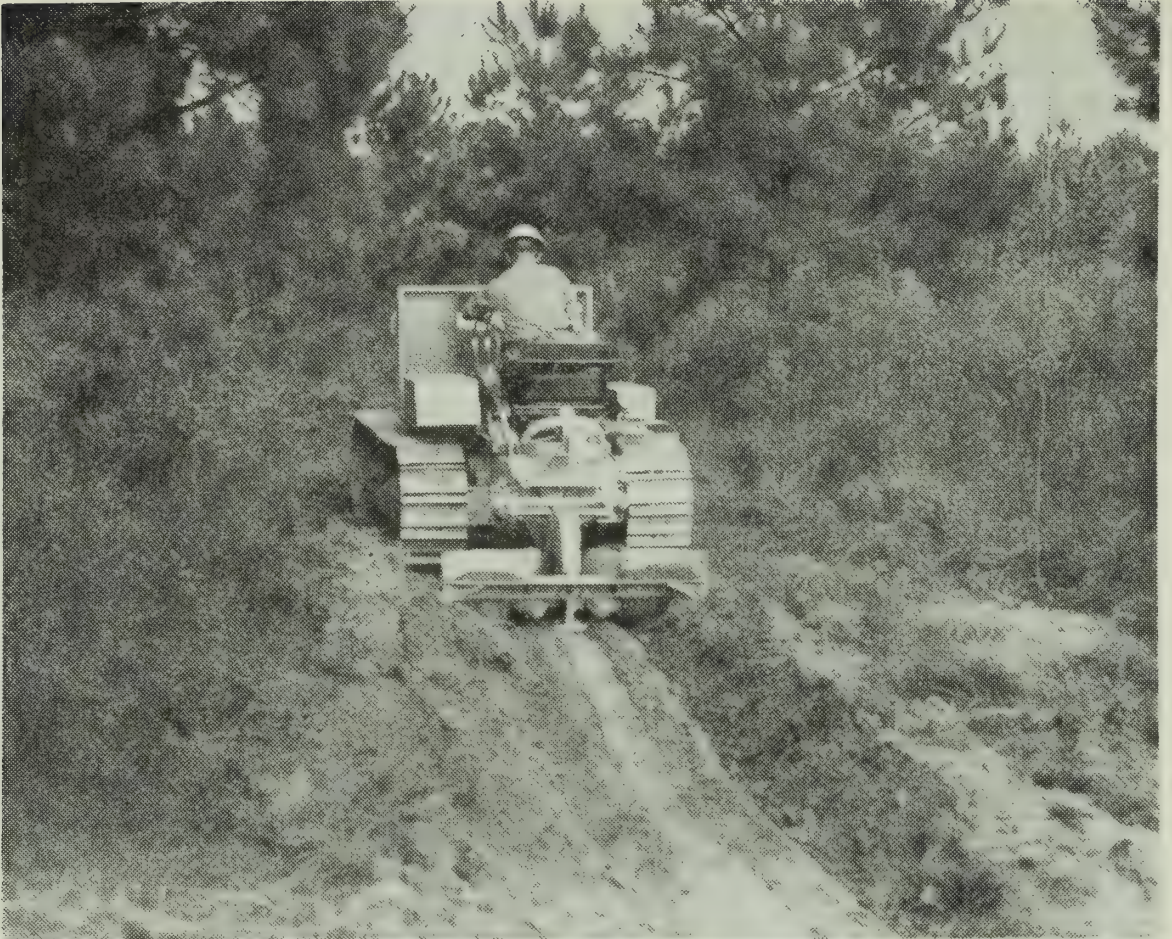
ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

134 Lookout Tower Units	\$2,942,503
46 Fire Danger Measurement Stations.....	3,450
332 Miles Telephone Line.....	99,600
Central Repair Shop and Warehouse System.....	150,000
Central Radio & Photographic Shop.....	25,000
6 District Repair Shops.....	30,000

Radio:	7 Remote Control Base Stations,		
	60 watt	@ \$ 1,200	\$ 8,400
	2 Remote Control Base Stations,		
	60 watt	@ 1,800	3,600
	1 Remote Control Base Station,		
	250 watt	@ 3,600	3,600
	1 Remote Control Base Station,		
	100 watt	@ 2,000	2,000
	25 Base Station Units,		
	50 watt	@ 900	22,500
	155 Base Station Units,		
	10, 25, and 30 watt.....	@ 535	82,925
	235 Mobile Units (Single		
	Channel) in Trucks		
	and Cars	@ 550	129,250
	46 Mobile Units on Tractors	@ 650	29,900
	6 Mobile Units (Dual		
	Channel)	@ 625	3,750
	5 Portable Units.....	@ 400	2,000
	35 Special Radio Control		
	Units for Wardens	@ 135	4,725
	90 Auxiliary Receivers (in		
	Wardens' Homes)	@ 250	22,500
			315,150

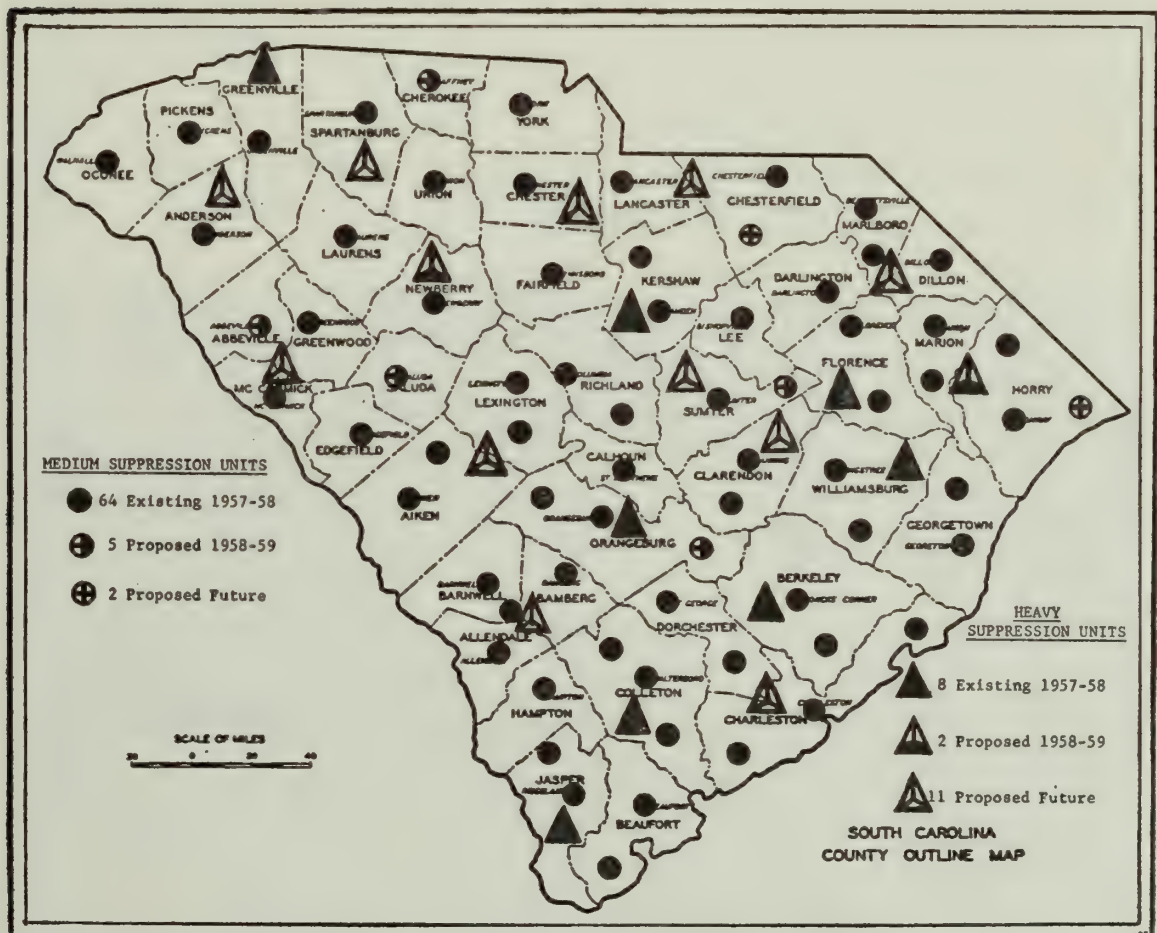
TOTAL			\$3,565,703



The Commission operates and maintains 64 light fire suppression units (above) to assist woodland owners in protecting their woodlands from wild fire. Heavy suppression units (below) are stationed in each district and used where lighter equipment cannot do the job.

Equipment:

During the fiscal year, seven additional light crawler tractors equipped with fire suppression plows and truck transports were purchased and assigned to county use. One new heavy suppression unit was assigned to the Camden District. Six new ranger pickup trucks were purchased as replacements for old worn-out units. Eight two-ton tractor transport trucks were purchased for replacement in the counties. Two old light tractor suppression units were replaced with new crawler-type tractors during the year. One new sedan delivery truck was purchased for replacement of vehicle operated by one traveling mechanic.



INVENTORY FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1958

	<i>Items</i>	<i>Values</i>
2327	Back Pack Pumps.....	\$ 35,934
5014	Fire Rakes.....	17,220
2669	Fire Swatters.....	10,656
323	Backfire Torches.....	6,600
9	Heavy Crawler Tractors.....	68,000
1	Medium Crawler Tractor.....	7,600
56	Medium Suppression Units.....	188,800
4	Light Wheel-Type Tractors.....	6,500
10	Heavy Duty Plows.....	9,000
1	Medium Duty Plow.....	450
53	Light Duty Plows.....	16,600
1	1/4-Ton Jeep w/Plow.....	1,850
62	Equipment Transport Trucks.....	146,000
9	Truck Tractors, Heavy Duty.....	33,000
9	Equipment Transport Trailers.....	27,300
47	Ranger Pickup Trucks.....	98,230
7	Sedan Delivery Trucks.....	14,000
3	2-Ton Stakebody Trucks.....	6,000
10	1/2-Ton Pickup Trucks.....	17,000
1	300-Gallon Tanker-Trailer w/Pump.....	1,200
1	Mobile Radio Trailer.....	2,500
TOTAL		<hr/> \$714,440

The Fire Control Branch operates a Central Repair Shop at Sumter where heavy and specialized repairs are made to fire control equipment. Three traveling mechanics, headquartered at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operators, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 677 complete field inspections of equipment and conducted 500 field repair jobs. The Commission of Forestry is in the process of completing a district repair shop at each of the seven district headquarters. The heavy suppression unit operator-mechanics will be headquartered at the shop, and in addition to operating heavy equipment on fires, will conduct an intensive autom-

tive maintenance and repair program from these local headquarters.

The Central Shop personnel at Sumter made many repairs to equipment owned by the Commission and manufactured numerous items necessary for field use. Some of the work handled by the mechanical force is listed below:

Major repairs were made to 41 light tractors, 9 heavy tractors, 65 light trucks, 55 heavy trucks, 5 light plows, and 4 heavy Trailers. Minor repairs were made to 5 light tractors, 15 light trucks, and 16 heavy trucks. Repairs were also made to 1 ditching machine, 2 forklifts, 1 diesel air compressor, 1 tractor crane, 1 radio light plant, 1 cement leveler (finishing machine), and 1 hole digger.

Six steel lookout towers were erected during the fiscal year 1957-58.

Two radio power houses, 2 radio aerial mounts, 100 pallets, 2 gates, 6 stainless steel tanks for pickup panama pumps, 1 set



The seven District Motor Vehicle Maintenance Shops handle most of the minor repairs of fire control mechanical equipment in the field. Major repairs are handled at the Central Maintenance Shop in Sumter.

screens for Kingstree District Repair Shop, 1 aerial stand for Kingstree District Repair Shop, and 6 frames and screens for shop fans were manufactured at the Sumter Shop.

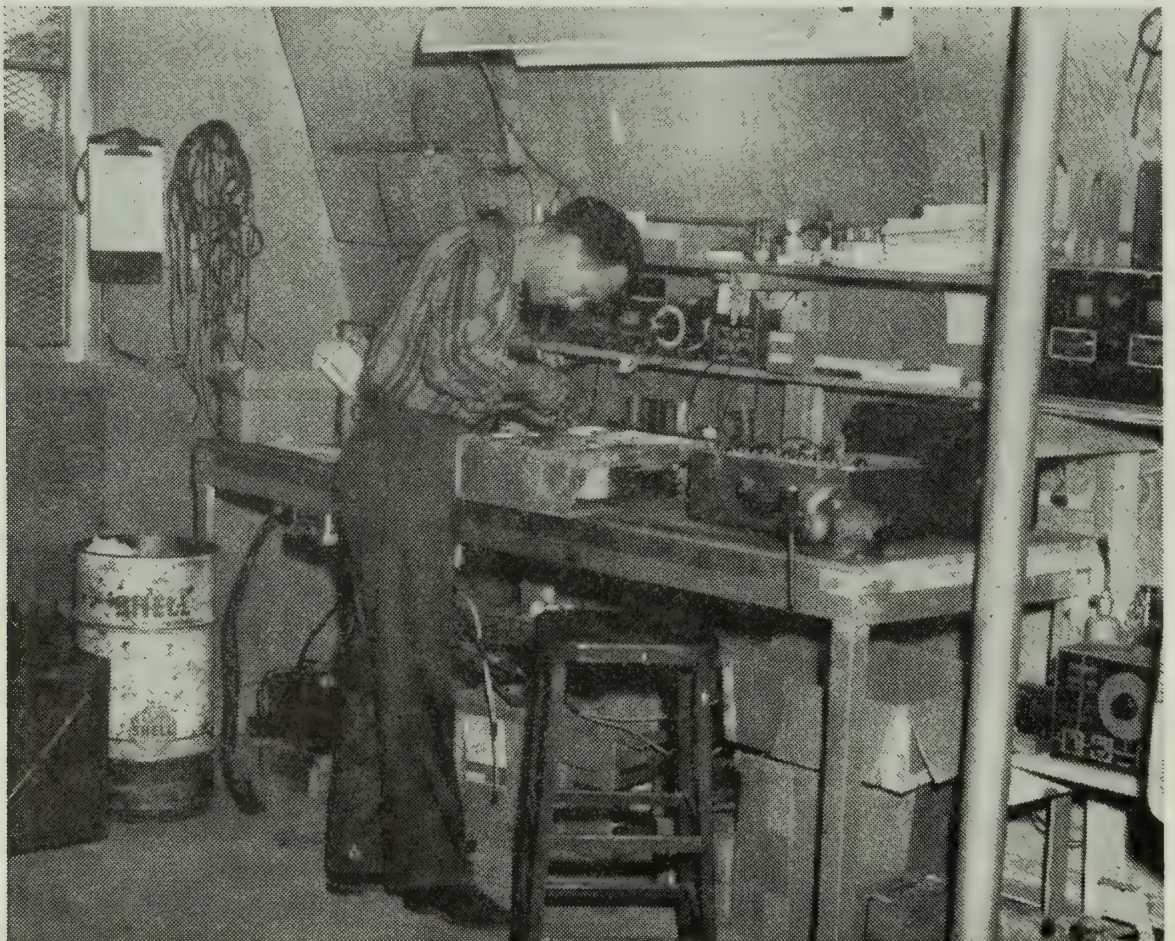
Telephone Lines:

The telephone system of the Commission of Forestry has been considerably reduced in mileage over the past several years by replacement with two-way radio. However, at the end of the fiscal year, the Commission continued to maintain in operation 315 miles of line along with associated instruments, etc., for providing services that are essential to the Commission's activities and for which radio is not suited.

There were no major changes made to the system during the year such as construction of new lines or salvage of old ones. The usual routine maintenance program was carried on during the year by personnel of the Commission in such manner that service was satisfactory on the lines throughout the year.

Radio

Considerable improvement in maintenance of the two-way radio system has been noted since locating three radio technicians



The four District Radio Repair Shops are an important part of the fire control program in providing and maintaining an efficient communications system.

in district repair shops. This puts them close to the equipment and saves time in effecting repairs.

The two technicians working out of the Columbia Radio Shop alone handled over 400 radio outages in addition to numerous re-installations during the fiscal year.

Such a schedule was duplicated to a large extent in the Walterboro, Kingstree, and Spartanburg Radio Shops.

Power, frequency and modulation measurements were made on all radio equipment at six-month intervals in addition to other phases of the program.

Use of Aircraft in Fire Control:

The Commission of Forestry uses light aircraft on a contract basis when such is needed in the detection or suppression of forest fires in the state. The use of light aircraft for detection is a necessity on high class fire days with low visibility when the lookout towers cannot adequately cover their area of responsibility. Many fires can occur and burn for long periods of time before being discovered unless aircraft is used to supplement detection on the low visibility days.

The use of aircraft is of tremendous assistance in the direction and suppression of fire control forces on large fires. An experienced fire control supervisor can quickly scout a large fire from an airplane and rapidly develop a plan of attack. Information relayed to the fire boss on the ground enables him to construct firebreaks to the best advantage, taking advantage of natural barriers, such as roads, streams, and swampy areas. Under erratic fire behavior conditions on a large fire, the use of light aircraft is a necessity for safety purposes.

The Commission leases a privately owned plane on a contract basis when the need for a plane arises. The Commission installs two-way radio equipment and provides an observer for each air patrol flight. During the fiscal year 1957-58, planes were furnished where needed to the limit of closely budgeted funds.

Fire Danger Measurement:

Forest fire danger measurement stations are located in each county of the state. These stations are used to carefully weigh all of the weather factors which have a direct bearing on the rate of fire occurrence and the behavior of all woods fires. An analysis of the weather factors gives the observer a fire danger rating which is disseminated to all fire control personnel. These

ratings range from one to five with one indicating the lowest fire danger which may exist and five the highest. With this daily information, fire control personnel are better able to determine the probability of fire occurrence and also the expected rate of spread in the event they occur. They are thus aided in the efficient planning of their daily work activities and when necessary, make themselves available immediately for fire calls. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the major five ratings: 196 Class No. 1 fire days; 114 Class No. 2 fire days; 50 Class No. 3 fire days; and 5 Class No. 4 fire days. No Class No. 5 days were experienced during the year.

Legal Fires:

Each year, large areas of forest land are intentionally burned by landowners or by authorized agents. These fires burn on the landowner's own property and are classified as legal fires since the owner desires that these lands be burned. A total of 1,356 fires burning 110,963 acres was recorded by the local county personnel during the fiscal year. A total of 395 fires burning 42,701 acres was attributed to desires of landowners to reduce forest fire hazards. For the production of game, birds, and improvement of shooting conditions, 339 fires burned 55,820 acres. Fifty-eight fires were started to rid timber areas and/or potential forest lands of accumulated debris and rubbish. These debris fires burned 2,132 acres. There were 500 fires burning 8,003 acres conducted for grazing purposes. Sixty-four fires burning 2,307 acres were conducted for miscellaneous purposes such as boll weevil eradication, destruction of snakes, ticks, insects, etc. There are a few of these fires that are handled under technical supervision, however the vast majority of these so called legal fires have proven quite destructive to timberland areas; and no consideration is given to the potentialities which exist on these timber productive areas.

FOREST FIRE SUMMARY

South Carolina experienced the least number of fires and the lowest acreage burned ever experienced for the entire state since state-wide fire protection was established in 1946. A total of 2,590 fires burned 20,253.0 acres of forest land or 0.18% of the total forest area under protection. The average size of these fires

was 7.8 acres. The summer months were relatively quiet months with a low fire occurrence and acreage burned. Seventy-six percent of the total number of fires and 86% of the total area burned occurred during the months of December, January, February, March, and April. All fires were handled very efficiently by county fire fighting forces with the cooperation and assistance of numerous volunteers. The availability of more and better mechanized equipment aided materially in placing these fires under control.

The highest rate of fire occurrence was experienced in Clarendon County where 189 fires burned 1,572.6 acres. The greatest acreage loss was experienced in Berkeley County where 183 fires burned 2,149.7 acres. Other counties with high rates of fire occurrence and acreage burned were Colleton County 121 fires burning 1,104.8 acres; Horry County 123 fires burning 1,117.9 acres; Jasper County 88 fires burning 1,159.6 acres; Orangeburg County 153 fires burning 2,030.5 acres; and Williamsburg County 109 fires burning 1,660.5 acres. Counties experiencing 30 fires or less for the fiscal year 1957-58 were Abbeville, Calhoun, Cherokee, Chester, Dillon, Edgefield, Fairfield, Greenwood, Lancaster, Laurens, Lee, Marion, McCormick, Newberry, Saluda, and Union. With the exception of Lee County, the area burned in the counties having 30 fires or less averaged considerably less than 300 acres for the year.

The major causes of forest fires were attributed to smokers, debris burning, and incendiarism. These three causes were responsible for 81.8% of all the fires which occurred during the year.

With the exception of three months, the entire fiscal year 1957-58 experienced normal or above normal precipitation. The total rainfall for the state averaged 55.18 inches which was 7.93 inches above normal for the fiscal year. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

MONTH	Amount Rainfall (Inches)	Departure from Normal (Inches)
July -----	3.44	—2.41
August -----	4.16	—1.49
September -----	7.05	+2.89
October -----	2.62	—0.30
November -----	6.74	+4.41

December	2.44	—1.09
January	4.36	+0.92
February	4.22	+0.20
March	4.96	+0.95
April	7.14	+3.89
May	3.50	+0.01
June	4.55	—0.05
<hr/>		<hr/>
Total	55.18	+7.93

A five-year summary of precipitation by fiscal years is shown below. Note that a deficiency has been experienced each year up until this year.

YEAR	Amount Rainfall (Inches)	Departure from Normal (Inches)
1953-54	40.38	— 6.98
1954-55	37.69	— 9.57
1955-56	43.16	— 4.01
1956-57	43.15	— 4.02
1957-58	55.18	+ 7.93
<hr/>		<hr/>
Average	43.91	
Total Accumulated Deficiency		—16.65

FOREST MANAGEMENT

SUMMARY

The Commission of Forestry continued to direct the major part of its forest management program to assisting small, private, woodland owners with their management problems. There was no appreciable change in the type of ownership of the woodland areas in the state. The larger industrial ownerships control approximately twenty per cent (20%); all types of public ownership control seven per cent (7%) and the small ownerships control the remaining seventy-three per cent (73%) of the woodland area. According to the most recent information available, most of the public, industrial and larger land ownerships are handling their woodland areas as they should for maximum forest production. The greatest problem still exists with the small woodland owners who control seventy-three per cent (73%) of the woodland area.

There was considerable turnover of technical forestry personnel during the year, however, replacements were secured with little delay. There was a considerable increase in the work load through continued cooperative effort in the Soil Bank program and in increased demands for assistance with forestry practices under the Agricultural Conservation Program. An increase of two technical foresters was made in an effort to help catch up with some of this additional work load.

During the year Commission Foresters made woodland examinations on 1,423 separate woodland areas covering approximately 208,821 acres. A total of 14,443,209 board feet of sawtimber was marked and 7,881 cords of pulpwood marked for private landowners. This was a new high in the number of separate woodland examinations made and in the number of separate tracts marked. Commission Foresters referred 148 landowners to Consulting Foresters and referred 109 landowners to Industry Foresters. These cases consisted primarily of tracts that were large in area and which would have tied up the Commission Forester for many days if he had undertaken the complete job. The Commission continued the policy of referring as many jobs to Consulting Foresters as possible.

Landowners continued to receive excellent prices for selectively

marked sawtimber and pulpwood. Average sawtimber prices reported were above the last ten year average. An intensive study of factors relating to sawtimber prices is now being made by the Southeastern Forest Experiment Station in cooperation with the S. C. State Commission of Forestry. The purpose of the study is to determine what effect quality, amount of sawtimber per acre, size of trees, distance to nearest town, and many other factors might have on the price received. Prices for selectively marked timber average considerably higher than those for timber that was sold without the benefit of a forester's estimate. When this study is completed it is expected that some good marketing information will be available.

Requests for forest management service by South Carolina landowners reached an all-time high in 1957-58 for the second straight year. With the loss and turn-over of personnel, the Commission was unable to service some requests without considerable delay, up to three months in some instances. At the end of the year the outlook was much better and, if personnel can be stabilized, it is expected that the forest management assistance program to small, private owners can reach many more landowners and considerably more acreage than in past years.

The Commission's nursery program continued to expand at a very rapid rate. A third nursery was placed in operation during the year and a location for a fourth nursery was selected. Seedlings will be available from three Commission nurseries during the winter of 1958-59. The annual production that can be maintained at these three nurseries is in excess of 100,000,000 seedlings. Some areas at each nursery were planted for the second year in a row in an effort to produce as many trees as possible for 1958 planting season. Estimated production for the winter of 1958 is 125,000,000 seedlings.

Demand for seedlings for the 1958-59 season is in excess of 200,000,000 trees. The Commission will only be able to supply a little more than half of this demand. Demand last year was for about 150,000,000 seedlings with production being only 61,246,200 seedlings. An additional 5,200,000 were purchased out-of-state and distributed to South Carolina landowners. Table No. 11 in the appendix shows this distribution by counties.

The necessary funds for construction of the third and fourth nurseries and funds for expansion at both the Tilghman and

were available to employ five Forestry Aides to assist with tree distribution, cone collection, planting, site inspections, demonstrational planting, and other related nursery activities. It is hoped that with the assistance of these men, a better field survival of tree planting can be obtained. Last year's survival (1955-56) was only 60% for all seedlings distributed.

The State Commission of Forestry continued to operate four state forests. The combined area of these state forests represents about one per cent of the total forest area in the state. Experimental and demonstration plantings, other forest management experiments and other activities were continued on these forests. Since about 40% of the total land area in the state forests is still in an unproductive state, major emphasis continued to be directed towards reforesting this non-productive area. A total of 459 acres of scrub oak land was cleared during the year and has been, or will be, planted to pine next season. During the past ten years a total of some 5000 acres of state forest lands has been cleared of worthless scrub oak and converted to pine stands.

During the year, a third survey of the state's forest resources was completed. The compilation of this data has not been completed but will be released in 1959. This survey will provide up-to-date information concerning the number of acres in forest land, growth, drain, standing timber volumes, in fact, a complete report of forest resource conditions in South Carolina.

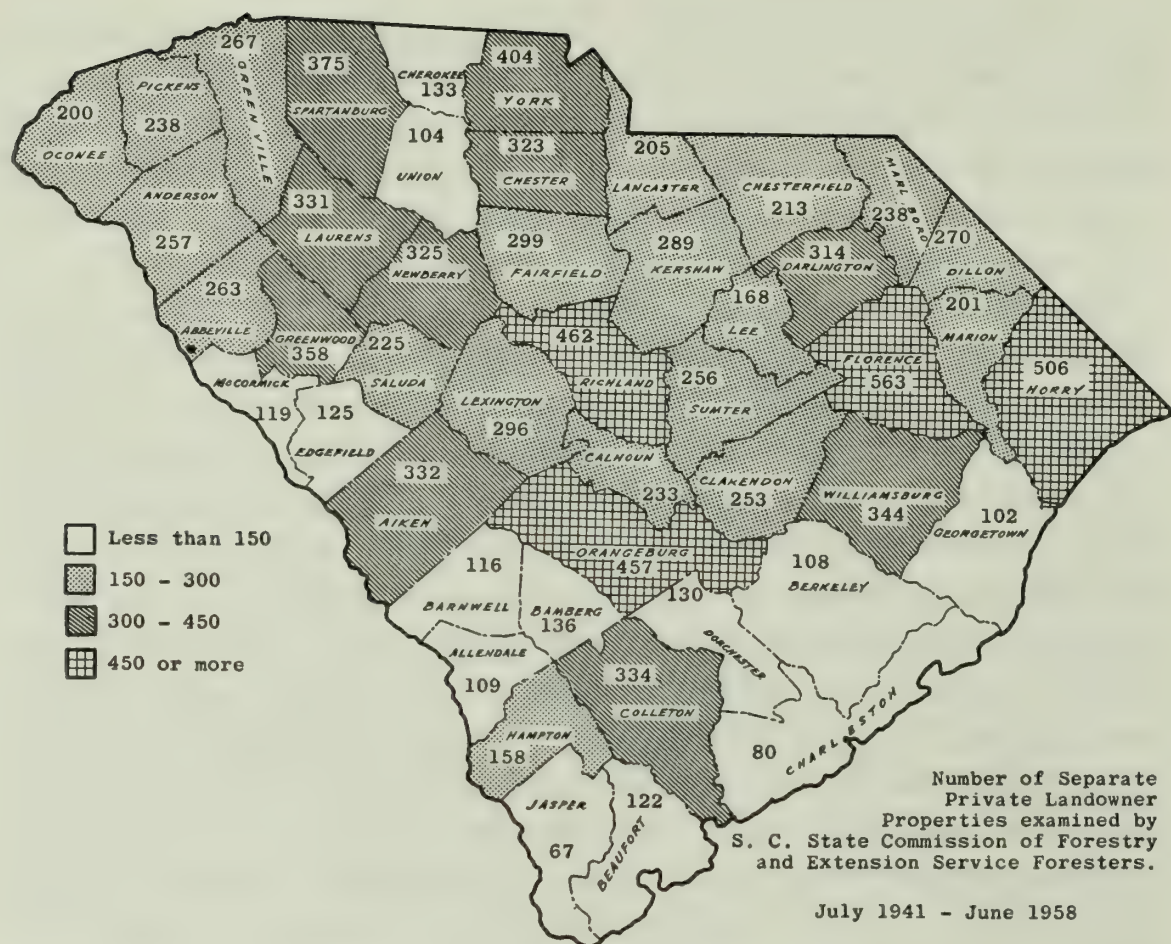
MANAGEMENT ASSISTANCE

The major emphasis of the Forest Management Branch activities was again directed towards assisting private landowners with their woodland management problems.

The State Commission of Forestry and the Clemson College Extension Service cooperate in providing foresters to help landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner, or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, and reforestation measures needed.

In cases where cutting of timber is recommended, a forester of the State Commission of Forestry, will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list



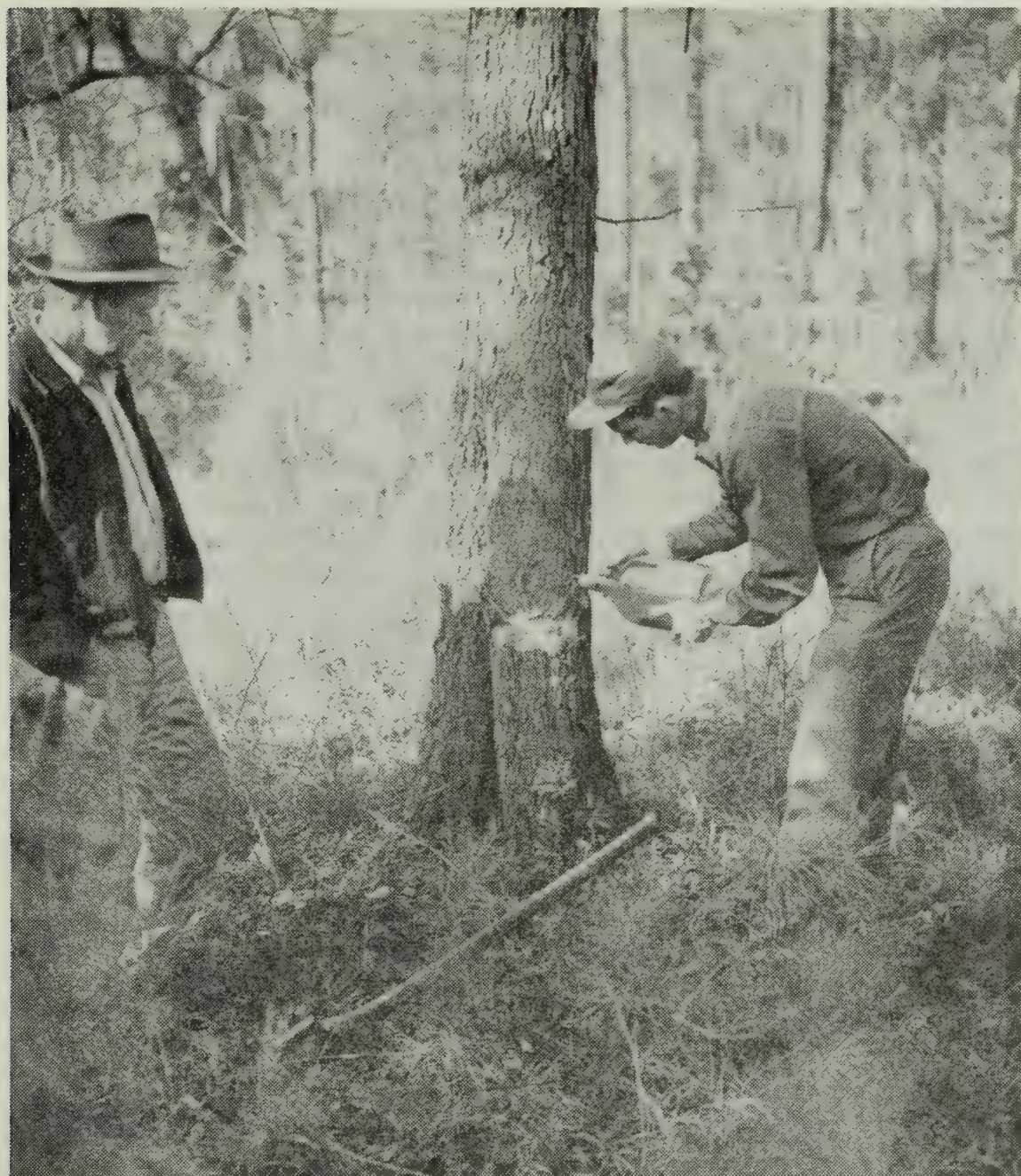
of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is fifty cents (\$.50) per thousand board feet or thirteen cents (\$.13) per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seed bed preparation, and the control of the "Brown Spot" disease in long-leaf pine. Recommendations for the use of prescribed fire are made only after a very careful analysis, with the landowners, of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

Timber Stand Improvement recommendations are also included in the woodland examination writeup. This would include measures necessary to replace the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees.

Cooperative work with the Agricultural Conservation Program was continued during the year. A considerable increase was noted in the number of landowners requesting forest practices through this Conservation program. It is expected that this will continue to increase for the next year or two.

In addition to the on-the-ground services as noted below, a large number of requests for general information and advice were answered by the central office and district office technical forestry staffs. These requests included information on scrub oak



Woodland management assistance to landowners by Commission foresters includes demonstration of latest techniques in control of poorly formed and weed trees that take up valuable space in the forest.

control, timber stand improvement work, industry location data, markets, etc. Commission Foresters handled an estimated 1,100 telephone calls regarding insect and disease control and made more than 400 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

During the year, Commission Foresters made 1,423 woodland examinations on 208,821 acres of forest land, and selectively marked a total of 14,443,209 board feet and 7,881 cords for 394 landowners on 12,305 acres of forest land. The following table shows the continuous increase in woodland examinations and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature. The number assisted this year is the largest number ever assisted in one year.

FOREST MANAGEMENT ASSISTANCE Summary By Years

Year	No. of Landowners	Woodland Acreage	No. of Landowners	Woodland Acreage	Bd. Ft. Timber	Cords Pulp
1941-42	213	37,500	84	14,792	8,271,202	-----
1942-43	145	62,204	59	8,769	13,851,707	862
1943-44	170	85,300	121	15,407	25,515,145	1,231
1944-45	309	161,412	108	15,359	16,033,407	639
1945-46	256	80,800	78	12,591	15,292,532	546
1946-47	445	105,896	203	18,408	24,735,103	4,237
1947-48	545	148,577	208	13,477	19,788,388	3,500
1948-49	706	126,600	235	13,768	22,009,336	4,429
1949-50	880	163,334	242	8,427	13,283,940	3,385
1950-51	998	173,057	339	14,275	19,634,153	3,896
1951-52	919	170,948	288	11,931	18,031,822	3,089
1952-53	931	142,054	315	12,109	16,332,715	3,935
1953-54	945	143,347	331	8,864	12,264,641	8,467
1954-55	1,166	184,754	399	9,477	13,875,377	5,162
1955-56	1,322	191,143	393	10,973	16,246,795	9,167
1956-57	1,148	163,479	304	8,248	11,365,157	6,008
1957-58	1,423	208,821	394	12,305	14,443,209	7,881
Totals	12,521	2,349,226	4,101	209,180	280,974,629	66,434

Commission Foresters and Extension Foresters continued to follow the practice of referring all larger jobs and some of the smaller jobs to Consulting Foresters and Industry Foresters wherever practical. Our records indicate 148 jobs referred to Consulting Foresters where properties were examined by Commission or Extension Foresters and it is estimated that about 100 jobs were referred directly to Consulting Foresters where original

Piedmont nurseries were made available from the Federal Government through the Soil Bank program. Also, Federal funds contact was made by Commission or Extension personnel. 109 jobs were referred to Industrial Foresters.

Prices received from marked sawtimber for the past five years are shown in the following table:

**TIMBER SALES SUMMARY FOR SOUTH CAROLINA
FIVE YEAR PERIOD**

Fiscal Year	No. Sales On Record	Weighted Average Price Received Per M Bd. Ft.
1953-54	54	\$ 31.53
1954-55	86	32.50
1955-56	104	35.91
1956-57	60	37.37
1957-58	71	35.72

Timber prices dropped slightly during the first part of the fiscal year. Demand for timber was slow during most of the year with some increase noted in May and June. This was particularly true of pulpwood. High quality sawtimber continued to bring premium prices. The average price for marked sawtimber sales was the third highest on record and was not appreciably less than the highest prices ever received. There were still large numbers of forestland owners who sold timber without proper technical assistance and who sold all timber to a low diameter limit. Reported prices per thousand for these sales were considerably less than prices received for marked timber.

Pulpwood demand was very low during the year. Some pick up in the market occurred in the spring and it is expected that demand will be about normal by fall. Overall production of pulpwood in 1957 was 8% less than 1956 production. There was a sharp increase in the use of chips and sawmill residue for pulping. Stumpage prices for pulpwood up to \$8.96 per cord were received. Most pulpwood sales, however, averaged about \$6.00 for the low country and Sandhills section and about \$5.00 for the upper Piedmont.

The demand for poles remained about the same and there was little variation in prices paid. The demand for small poles and fence posts continued to improve; however, demand for posts was limited to a small number of counties.

LUMBER AND PULPWOOD PRODUCTION BY YEARS

1942	1,079,351 M bd. ft.	946,000 Cords
1943	984,733 M bd. ft.	985,000 Cords
1944	850,748 M bd. ft.	1,053,000 Cords
1945	723,667 M bd. ft.	877,500 Cords
1946	1,005,700 M bd. ft.	955,700 Cords
1947	871,014 M bd. ft.	948,388 Cords
1948	798,700 M bd. ft.	1,108,523 Cords
1949	1,002,000 M bd. ft.	1,012,180 Cords
1950	997,000 M bd. ft.	1,182,413 Cords
1951	1,100,000 M bd. ft.	1,251,045 Cords
1952	958,000 M bd. ft.	1,275,698 Cords
1953	921,000 M bd. ft.	1,446,157 Cords
1954	950,000 M bd. ft. est.	1,330,888 Cords
1955	1,000,000 M bd. ft. est.	1,513,313 Cords
1956	900,000 M bd. ft. est.	1,806,571 Cords
1957	850,000 M bd. ft. est.	1,743,004 Cords

The production of sawtimber is estimated at slightly less than the 1956 production. It is estimated at some 10% below the average production for the past 10 years.

There was no appreciable change in the number of forest products industries operating within the state; however, one large sawmill ceased operating.

There were no new sawmills located within the state during the year, however, work was continued on the construction of the Bowers Carolina Pulp Mill which had already been started.

The average size logs now available to sawmill operators is smaller than in past years. The trend in forest management continues to be towards shorter rotations and quicker returns. The objective of the Forestry Commission's landowner assistance program is to help guide private forest landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time. The number of landowners availing themselves of this service is steadily increasing.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired either full or part-time foresters.

The pulp companies continued to furnish the services of their Conservation Foresters to assist landowners with proper thinning of pulpwood. It is the responsibility of these foresters to help sell private owners on the idea of "sustained yield" in managing their woodlands. According to estimates received from the

Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

Commission Foresters in the field offices and in the central offices field checked approximately 400 separate properties for insect and disease damage. Recommendations were given the owners regarding treatments necessary to control or check the spread of the diseases or insects. More than 1100 telephone calls were answered regarding insect or disease where no field check was necessary. There were no epidemics of disease or insects during the year; however, the Ips and Southern Pine Beetle attacks killed many trees during the summer and fall of 1957. A check for Oak Wilt was continued but none was located in South Carolina. Clemson College has been given authority to handle any control work necessary for forest diseases and insects. Commission Foresters will cooperate with Clemson in this work under the terms of a working agreement that has been executed by both parties.

A training school was held for all technical personnel with instruction handled by the central office staff. The training at this school was designed primarily to better equip the Commission's field foresters to assist the small landowner. In addition to this group training, periodic individual training and inspection was given to all field foresters.

REFORESTATION

A total of 60,846,200 seedlings were produced and distributed from the Commission nurseries. Distribution by species was as follows:

Loblolly Pine	23,874,150
Slash Pine	36,314,900
Longleaf Pine	577,750
Arizona Cypress	162,250
Red Cedar	300
Short Leaf Pine	16,100
Yellow Poplar	750

In addition to the above seedlings produced and distributed by Commission nurseries, the following list shows trees brought into the state or produced in the state by other nurseries.

West Virginia Pulp & Paper Co., Summerville	13,325,000 trees
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Brought into state by other	
Industries	3,322,500 trees
Brought into state by A.E.C.	10,277,384 trees
Brought into state by the Commission	
through purchase from N. C.	5,600,000 trees

This adds up to a grand total of 93,369,084 trees planted in South Carolina during 1957-58 season. This is by far the largest number of trees ever planted in one year in the state. In spite of this, orders were received for more than double this supply. Some orders had to be cut as much as 70%.

The Commission had two nurseries in production during 1957-58 and planted seed at the third nursery from which trees will be available in 1958-59. Again, all possible space was planted to seedlings in an effort to catch up with demand. At all the nurseries major effort was devoted to maintain soil fertility and increase organic content of nursery soils.

Tables No. 10 and No. 11 in the Appendix show a record of seedlings distributed by counties and class of ownership. Table No. 12 shows total acreage planted by counties and acres in need of planting. The following table shows the number of seedlings planted in South Carolina by years, including out-of-state seedlings.

1928-29	142,000
1929-30	148,000
1930-31	986,000
1931-32	976,000
1932-33	996,000
1933-34	1,031,000
1934-35	7,529,000
1935-36	23,000,000
1936-37	22,000,000
1937-38	11,192,000
1938-39	10,854,000
1939-40	12,244,000
1940-41	21,165,423
1941-42	10,275,037
1942-43	4,742,010
1943-44	5,662,608
1944-45	1,926,840
1945-46	6,402,255
1946-47	1,962,600

1947-48	11,356,990
1948-49	30,338,775
1949-50	29,501,955
1950-51	20,615,315
1951-52	16,619,000
*1952-53	32,246,298
*1953-54	42,852,314
*1954-55	45,182,255
*1955-56	42,931,755
*1956-57	69,658,736
*1957-58	93,369,084

TOTAL 577,907,250

*Includes trees planted on the A. E. C. area supplied from federal nurseries, and also trees from forest industry nurseries.

Considerable funds were expended in 1957-58 to purchase and acquire as much seed as possible. An excellent crop of loblolly pine seed was available and more than a two year supply was obtained. The slash crop was almost as good and about one and three fourths year supply obtained. Emphasis will be placed on the procurement of slash pine in 1958-59 to bring this supply up to two years needs.

TILGHMAN NURSERY

This was the eleventh year of nursery operations at the Tilghman Nursery, Wedgefield, S. C. A total of 338,901,010 seedlings



The Commission's modern seed extraction plant at Wedgefield has improved greatly the quantity and quality of seed produced for operation of the nurseries.

have been grown and distributed. The 1957-58 production was 42,678,350 seedlings.

The average cost per thousand from state funds was \$2.87. After overhead and cost for field demonstrations are included the cost per thousand would exceed \$3.00 per thousand by a small amount.

Production at the Wedgefield Nursery was reduced from last year so that a better soil building program on the idle portion of the nursery could be carried out.

A modern seed extraction plant was completed during the year and excellent results obtained from the cones processed through this plant. The Commission was able to obtain about 30% more seed per bushel of cones thus reducing seed cost by some 25% to 30%. With approximately \$100,000 annually needed for seed procurement a savings of 30% is considerable.

PIEDMONT NURSERY

The first full year's operation was completed at the Piedmont Nursery. All of the construction facilities were completed and slightly more than one-half of the area planted to a crop of loblolly pine. A total of 18,167,850 seedlings was lifted and distributed from this nursery. It is expected that the 1958-59 production will be approximately 23,000,000 seedlings.

This nursery is in excellent operating condition and with the exception of a few acres the soil fertility levels are satisfactory. There are some eight to ten acres that need intensive soil building treatment to bring them up to standard.

COASTAL NURSERY

Seed were planted and a crop of seedlings will be lifted from this nursery in the winter of 1958-59. The June inventory showed some 62,000,000 seedlings will be available for distribution by December 1958. Practically all of these seedlings will be slash pine.

All of the construction was completed and the irrigation system is installed on about sixty-five acres. The irrigation system will be completed on approximately 20 acres more in September and October, 1958. Considerable leveling and drainage installations had to be completed before the irrigation system could be installed on this last 20 acres.

This nursery is expected to produce annually 40,000,000 to 45,000,000 seedlings. The first years planting was for an over-pro-

duction, however, in 1959-60 only about 40,000,000 seedlings can be grown.

FOURTH NURSERY

Just prior to July 1, 1958, preliminary plans were made to establish a fourth nursery in the state. This nursery is definitely needed with some 200,000,000 seedlings annually requested by landowners and the Commission's present three nurseries only capable of producing some 110,000,000 annually.

COOPERATIVE FOREST MANAGEMENT

During the fiscal year thirteen cooperative forest management projects were operating in the state. All of the projects were not manned for the entire twelve month period. There were a number of resignations of technical foresters during the year and some time elapsed before replacements were obtained. Due to the turn-over in personnel on these projects and an increase in requests for forest management assistance, many landowners who requested service were unable to obtain assistance without waiting for a two to four month period. Beginning July 1, 1958, two additional projects are planned. A summary of work accomplished by these cooperative forest management foresters is included with the data for each district.

WATERSHED PROJECTS

A number of preliminary examinations were made during the year to determine the feasibility of beginning new small watershed improvement projects. Some seventeen separate areas have been examined. There were no new projects actually set up for action during the year. A statement concerning the two that are in operation follows.

TWELVE MILE CREEK PROJECT

The Pilot Watershed Project on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the U. S. Forest Service and the Soil Conservation Service. A total of 656,500 seedlings was planted on 735 acres of badly eroded and gullied land within the project boundaries. A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover could be established. In addition to this work, the Project Forester assisted eight landowners in properly marking and selling sawtimber and pulpwood. A total of 67 cords of pulpwood was marked for these eight owners. However, many more tracts were marked by pulpwood



Above, badly eroded land after planting to pine in a relatively short time can begin to improve in quality, productivity, and water-holding capacity. Below, only three years later, land that was once worthless and an erosion problem shows signs of improving in value and usefulness.

company foresters with the Project Forester checking the work. In addition, recommendations for planting, brush control and other measures needed on some of the woodland areas were given to many landowners.

CONEROSS CREEK PROJECT

The Coneross Creek Project completed a full year's operation. The work on this project was under the supervision of the same Project Forester who handles the Twelve Mile Creek Project. The Coneross Creek area is located near Walhalla, so there was not too much additional travel from the Twelve Mile area. This allowed the same person to supervise both project activities. A total of 750,000 trees was planted on 814 acres of gullied areas in this watershed. Forest management assistance was given to seven landowners and 74 cords of pulpwood were marked for four landowners.

STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below :

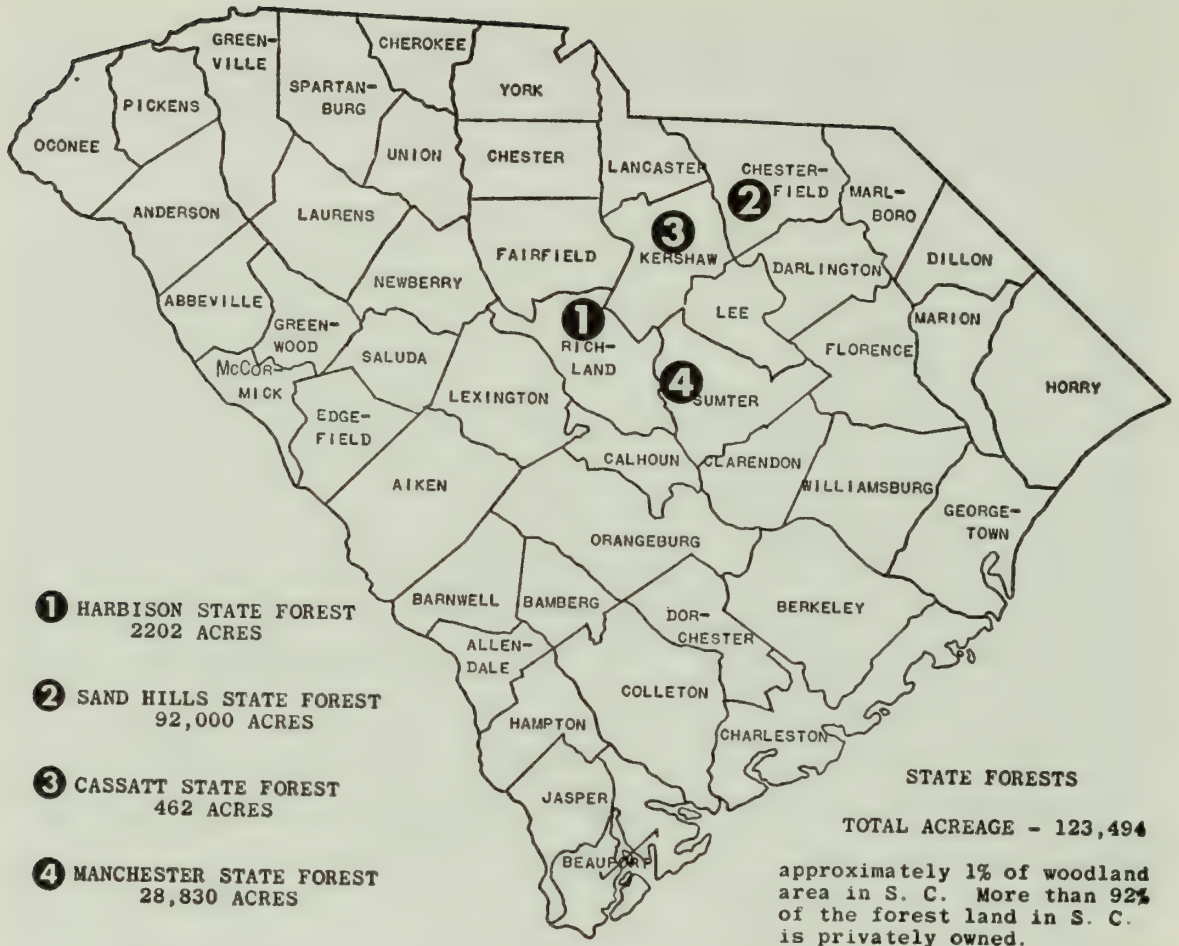
Cassatt State Forest	462 acres
Harbison State Forest	2,202 acres
Manchester State Forest.....	28,830 acres
Sand Hills State Forest.....	92,000 acres

TOTAL123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut-over and generally mis-used. The primary effort since acquisition by the state has been directed towards building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective is the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops in order to reduce the competition so that pine will survive and grow. Approximately 5,000 acres of scrub oak land have been cleared and replanted to pine in the past ten years. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.

Detailed reports of activities on each of the State Forests follow :



CASSATT STATE FOREST

Cassatt State Forest in Kershaw County comprises 462 acres. All of the old fields on the property have been planted to pine and there are some areas of well stocked natural stands, leaving about 300 acres of unproductive scrub oak area. Some funds have been made available for the 1958-59 season to begin scrub oak control operations on this 300 acres.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County Fire Control Organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year.

Most of the Harbison area is well stocked and in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the thirteen years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest, all operating costs and returned a substantial

amount to the state treasury. This year's timber sales consisted of 221,744 board feet which sold for \$8,869.76, 125.46 cords of pulpwood which sold for \$830.55; making a grand total in receipts of \$9,700.31.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state, effective June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat and to get all records of transfer completed. A survey has been completed for more than one third of the boundary lines during the last two years. Approximately one-third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak land and reclaiming it for pine production.

Fire Protection:

No fires occurred during the year. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter Unit Fire Control Organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners adjoining the area in the prevention, pre-suppression and suppression of forest fires. This fire record is the best ever posted for Manchester State Forest.

Approximately 600 miles of firebreaks were maintained or constructed during the year.

Fish and Wildlife:

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

Agriculture:

Thirty-four tenants rented 1,515 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, approximately 136 acres of newly cleared scrub oak land were rented for one season to watermelon growers.

Road and Truck Trails:

During the year 30 miles of truck trails were machined and washes filled, a number of bridges repaired and diversion ditches cleaned.

Management Plan:

A management plan was developed and is almost completed for the Manchester State Forest. The information obtained from a field survey has now been compiled sufficiently so that a guide to cutting, planting, timber stand improvement, scrub oak clearing, etc., is now available and is being used to carry out the necessary activities on the forest.



Removal of worthless scrub oak from large areas of three state forests is a costly but necessary step to the successful establishment of valuable pine plantations.

Tree Planting:

A total of 505,000 trees was planted on the forest during the year. These included 500,000 slash pine and 5,000 longleaf pine. Practically all of the above plantings were made by machine in the brush-cut and cleared areas and only a few thousand were planted in the old fields.

Forest Products Sold and Other Receipts:

Sawtimber	70,956 board feet.....	\$ 2,192.37
Pulpwood & Posts...	3,037 cords.....	23,529.54
Rentals & Leases.....		5,278.75
Total Receipts		\$31,000.66

Telephone Lines:

Eight miles of telephone lines in the forest system were brushed and maintained during the year. A number of breaks were repaired and general maintenance carried out to keep the telephone system in good working order.

Silvicultural Practices:

Again, the major silvicultural activity was the conversion of woodland scrub oak areas to areas suitable for planting pine. Since this brush clearing and plowing operation is a continuous one, there are some areas that had the brush removed in 1955-56 that were completed and plowed in 1956-57. Approximately 136 acres were cleared and plowed ready for renting to watermelon growers for one season. An additional 242 acres were partially completed. A total of 1857 acres has been cleared to June 1958.

Desirable seedlings were released by cutting the overtopping, undesirable trees on 460 acres.

Maintenance and Repair:

A large number of small maintenance jobs were completed on tenant houses and headquarters buildings. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair. The roof on the equipment shed was repaired during the year. A complete renovation job was done on the foreman's residence.

Some overhaul and repair of equipment was made. Personnel continued to work on equipment changes to increase the efficiency of the scrub oak clearing operation.

Demonstrations and Meetings:

The Manchester State Forest area was used for a training school for all technical personnel at an I & E Management school. Also, many of the new foresters were given some individual training on the area.

Shaw Air Force Base Lease:

The U. S. Army Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until July 30, 1962. The State Forestry Commission will be paid \$3,074 per year for this lease.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-long leaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95 year lease agreement.

Before the area was acquired by the government, it was heavily cut-over, badly burned and generally abused. As a result, major activities for the present and for several years to come should consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing of the forest stand. Almost half of the forest is scrub oak land. Thereclamation of this scrub oak land is the major silvicultural objective at present.

Tree Planting:

All planting was done by machine except for some experimental longleaf planting. All plantings were made in clearings. All of the old fields on this forest, except those being farmed, have now been planted to trees. A total of 335,000 slash pine and 129,000 longleaf pine was planted. A total of 13,534,500 seedlings has been planted on the property since 1935. Approximately two thirds of these plantings were successful.

Forest Products Sold and Other Receipts:

Sawtimber	155,561	bd. ft.....	\$ 5,612.35
Pulpwood & Posts...	1,384.74	cords.....	11,864.31
Agricultural Rentals			1,206.00
Total			\$18,682.66

Trespass:

Some stealing of pulpwood and timber continues to occur from the forest area. The amount is small at each location, however, it adds up to considerable value. Forest personnel have caught one person and SLED is working with Commission personnel in an effort to stop this stealing.

Fire Protection:

During the year 28 fires burned 118.2 acres. This is the second best record since the forest was established in 1939, and a very low fire loss for this type area. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield Unit Fire Control Organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

A total of 70.5 miles of firebreaks was plowed on the forest.

Recreation:

The Sugar Loaf Mountain Recreation area for white people continued to receive heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and latrines provided. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing, but no swimming is allowed.

The Park Division continued improvement work on Campbell's Lake Negro State Park. This area received heavy use during the year. A more detailed report will be found in the Park section of this report.

Fish and Wildlife:

No hunting was allowed on the area during the year. Fishing is allowed without permits in Sexton's Pond and Sugar Loaf Mountain Lake. Campbell's Lake is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws.

Agricultural Lands:

Fourteen tenants rent and farm 800 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers, have been abandoned and have been planted to pine trees.

During the 1956 watermelon season, 323 acres of land were rented to watermelon growers following the clearing of scrub oak from the area. Present plans are to continue to clear scrub oak lands and rent them one year to watermelon growers and then plant them to pine.

Roads and Truck Trails:

During the year 80 miles of truck trails were graded, brushed out, and washes filled in. Two culverts were repaired and eight timber bridges redecked. Fifty-five diversion ditches were cleaned out.

Silvicultural Practices:

A total of 323 acres of scrub oak was cleared with the brush cutter and/or cable, and plowed with the Athens plow.

Scrub Oak Clearing:

<i>Year</i>	<i>Acres</i>
1947-48	29
1948-49	290
1949-50	352
1950-51	307
1951-52	280
1952-53	535
1953-54	285
1954-55	380
1955-56	390
1956-57	200
1957-58	323
<hr/>	
Total	3,371

A number of experimental plots have been established using various poisons and concentrations in an effort to determine the most practical method of eliminating scrub oak competition so that pine can become established.

Records were maintained on thinning plots established in 1950.

Maintenance and Repair:

The Sugar Loaf Mountain Recreation area was maintained and all facilities in the area are in very good condition. The general condition of headquarters and director's residences is good; however, a number of the tenant houses are in need of considerable maintenance work.

Considerable maintenance was necessary on the motor vehicle equipment on the forest. At least one truck must be traded next fiscal year.

Boundary Surveying:

A Cadastral Engineer was sent by the Atlanta office of the U. S. Fish and Wildlife Service to continue work on boundary surveys for the forest; however, there are many more miles yet to be run to completely establish all boundaries. The surveying was done on an area where there was some dispute about the location of the Sand Hills State Forest lines. More work is planned for next fiscal year.

EXPERIMENTAL STUDIES

A number of experiments were continued that were begun within the last three years. These experiments were established in cooperation with the Santee Branch of the Southeastern Forest Experiment Station. These experiments are being carried out in an effort to determine the best forest practices that are applicable to the Sand Hills conditions. A growth study was completed for planted pine in the Sand Hills area. The result of this study shows that extremely high growth rates can be obtained through pine plantings on most every old field condition in the Sand Hills.

INFORMATION AND EDUCATION

INTRODUCTION

Informing and educating the people of South Carolina as to forest conservation and state parks problems and opportunities is a guiding principle of the S. C. State Commission of Forestry.

The Commission's information and education program is directed toward carrying out the functions of the Commission in protecting our forests from fire, encouraging wise management and use of our forest resources, and creating an understanding and an appreciation of the value and proper use of state park areas.

The job of the Forestry Commission involves not only trees, but people. It might truly be said that the work of the Commission is *of*, *by* and *for* people.

The information and education approach to forestry and state park problems and opportunities in South Carolina is the sum total of many people and many activities. It is a ranger or a warden talking to a landowner, to a class of school children, or to a volunteer offering help on a going woods fire. It is a district forester meeting with local citizens about the woods fire problem in a community, or conducting a tree planting demonstration for those ordering trees for the first time. It is a forester conducting a timber thinning demonstration in the woods with a class of vocational agriculture students, or presenting a program on conservation at a garden club or civic club meeting. It is a towerman talking to a visitor, explaining the fundamentals of forest fire prevention and forest fire control activities. It is a state park superintendent operating an area of a thousand acres or more and serving as host to ten thousand people on a hot summer day, or helping a school teacher unfold the mysteries of a nature trail to a group of children. It is a landowner understanding that one tree should be cut because it is overmature, while another should be left because it is growing wood at the rate of six to sixteen percent return on his investment. It is any South Carolinian realizing that even a little fire kills little trees regardless of why or how the fire started.

Yes, forestry and state park information and education activities involve many things and many people. Press releases, photographs, pamphlets, talks, field demonstrations, films, radio and

television programs are some of the tools used in carrying out the mandate given the Commission to inform the people of South Carolina on forestry and state park matters.

South Carolinians who are made aware of the seriousness of the problems that face our state in the fields of state parks and the conservation of our natural resources will realize that by taking positive action, these problems can be turned into opportunities.

As South Carolinians, as individuals, realize that each of us has some stake and responsibility in the present and the future of our forests and state parks, we find that there are things each one of us can do to turn these problems into opportunities for us, our families, our children, our community, and our State.

Because 93% of the forest land in South Carolina is in private ownership, it is obvious that people must know facts and techniques in order to turn forestry problems into opportunities. The need for solving these problems is pointed up by the fact that even though the forests of South Carolina support the state's second largest industry (next to textiles), the forests are producing at less than half of their potential capacity. When people realize the potential value of woodland production and apply practical methods of conservation and wise use, the amount of timber available for commercial use can be more than doubled. Most of the problems of forest conservation in South Carolina can be solved only through the efforts of the people who own the land and the general public.

The adoption of known techniques in forest conservation not only would assure the future supply of existing woodusing industries, but also the increased supply would permit an expansion of this important part of the economy of South Carolina.

South Carolina's forestry problems are problems both of trees and people. People cause 99% of our forest fires, and the poor cutting practices and the large amount of understocked or idle land reflect problems of people. The solutions to these problems lie with people, and the information and education program, as well as the fire control, forest management, and state park activities of the Commission are directed to people.

The aim of the Commission's information and education program is to get forestry and state park information to people so that the problems can be turned into opportunities. Information and education efforts are keyed to the following points:

1. Forest Fire Protection

Some 5,000 illegal woods fires occur every year in South Carolina and 99% are caused by people.

Landowners burn their own woods or permit their woods to be burned in all too many cases.

2. Unwise cutting practices mean low production and inferior forest products.
3. Some one and one-quarter million acres of idle land or unproductive forest land should be planted to trees.
4. Species of inferior quality occupy much of the existing forest land in the state. These inferior trees must be replaced with trees of good quality to achieve full woodland production.
5. Full use, appreciation, protection, and support of South Carolina's state parks program which exists to serve the recreational needs of people, and which does serve some three million people annually.

FOREST FIRE PREVENTION

Forest fire prevention efforts were given major attention with continued emphasis on the damage caused by the average slow-burning, quiet fires that so many South Carolinians are accustomed to seeing. Particular attention was given the little tree as one of the major losses, especially as their destruction seriously affects the stocking of our woodlands in the future.

With this very realistic approach to teaching forest fire prevention all personnel of the State Commission of Forestry conducted an intensive forest fire prevention program in each county. The value of our woodlands and the safeguards needed to perpetuate their contribution to the economy of the state was brought to the attention of every man, woman and child possible through personal contacts; posters and publications available through the national Cooperative Forest Fire Prevention Campaign; and illustrated talks and motion picture showings in community meetings, in private homes, civic club meetings, and school rooms. Wall and pocket calendars, roadside signs and exhibits as produced by the Commission broadened the means of bringing the conservation message to every citizen in the state.

Considerable credit is due also to other interested agencies, both private and governmental, in the efforts put forth on their part to assist the program of the Commission of Forestry in this and other phases of endeavor.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Again, the Commission lent full support to the Cooperative Forest Fire Prevention Campaign. This national program, featuring Smokey Bear, is guided by The Advertising Council, Incorporated, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service, and is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns.

In support of this national campaign a wide variety of materials featuring Smokey Bear is used in South Carolina.

Posters, booklets, bookmarks, blotters, newspaper ads, radio platters, TV spot films and other materials are used to bring fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear



Charcoal, a black bear cub, helps Smokey, the national symbol of forest fire prevention, in the 1957 Fire Prevention Parade in Columbia.

pocket flashlights, wallets and moccasins, T-shirts, scarfs, fishing tackle and archery sets, cigarette snuffers and ashtrays, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, banks, coloring books, comic books, story books, bubble bath, buttons, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, and Smokey Bear dolls.

FOREST FIRE RECORD

The branch of Information and Education continued to keep the press and public informed accurately as to the forest fire situation throughout the state, stressing the need for particular care during the critical dry and windy months of January, February, March, and April. This information is made available by articles and photographs for newspapers, and motion picture footage for television use, for example.

The continuing occurrence of intentionally set fires during the year pointed up the urgent need for an intensified program of child and adult education as well as the need for a strengthened law enforcement program.

SCHOOL PROGRAMS

Foresters, Rangers and Wardens of the Commission of Forestry continue to conduct educational programs in schools throughout the state bringing information on forestry to school children and teachers. Some 765 programs were held in the 5th and 6th grades where colored slides helped bring the conservation story to 33,785 school children. Similar slide programs as well as demonstrations were held in vocational agriculture classes in each county. As a result of requests from teachers, programs are held in many other classes, too. Many of the slides used are of local scenes and local problems. This creates local interest and increases the educational value of such programs.

In addition to the slide programs all 3rd grade children (numbering 70,740) received a copy of the booklet "Smokey Bear's Story of the Forest." In school auditoriums, 616 movie showings brought conservation messages to 85,146 students of all grade levels.

The broad aim of the Commission's school programs is to build a stronger and more appreciative community of the future by giving basic instruction and information to our children as to the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.



Fifth graders on a class field trip along a state park nature trail, observe and study the interrelationships of the many different plants and animals that live together in a forest.

FORESTRY DEMONSTRATIONS

During the year 4,566 persons attended 122 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations in general cover forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species and timber stand improvement.

Demonstrations are very effective in getting forestry information to people and can do much to help make it possible to grow an appreciably greater amount of valuable timber on the 12 million acres of forest land in the state.

In most case demonstrations were held in cooperation with foresters of various companies, the Clemson Extension Service, and other groups and organizations. Georgetown Timber Festival was held during the week of October 26, 1957. Sponsored by the Georgetown Chamber of Commerce, the festival constitutes an expression of appreciation by the people of Georgetown to the woodusing industry of the county and the good living

realized from the sale of raw products from the woodlands of the county and the manufactured products from the mills. The activities of the festival included boat races, barbecues, a wood cutting contest, street and ballroom dances, crowning of a queen, and an impressive street parade. The Commission of Forestry participated in the Timber Festival by providing a float for the parade.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies and organizations cooperated to make the 1957 Conservation Week a real success. South Carolina law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, a special program sheet was printed and distributed to schools, churches, civic and patriotic organizations and other interested groups to assist them in planning programs and observances during Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

A total of 1,154 Conservation Week and Arbor Day programs was held, with 137,698 persons attending.

FIRE PREVENTION ROADSIDE SIGNS

Maintenance of fire prevention roadside signs was carried out by rangers and wardens in every county of the state. The signs, erected in a series of three, carry the Keep South Carolina Green seal and messages in the following sequence: **USE YOUR ASH TRAY—PREVENT WOODS FIRES—PROTECT LITTLE TREES.**

The Commission has obtained basic coverage on the main highways over the state. It is hoped to be able to intensify this project from year to year by providing additional signs along highways where thousands of motorists will see these forest fire prevention reminders.

MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 91,752 people saw motion pictures on forestry at 793 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

An excellent means of getting forestry information to many people is through the school forestry program carried on jointly by the Division of Vocational Agriculture of the State Department of Education and the State Commission of Forestry. This cooperative program has been carried on yearly since 1930, when forestry was added as a course of study in vocational agriculture classes in South Carolina.

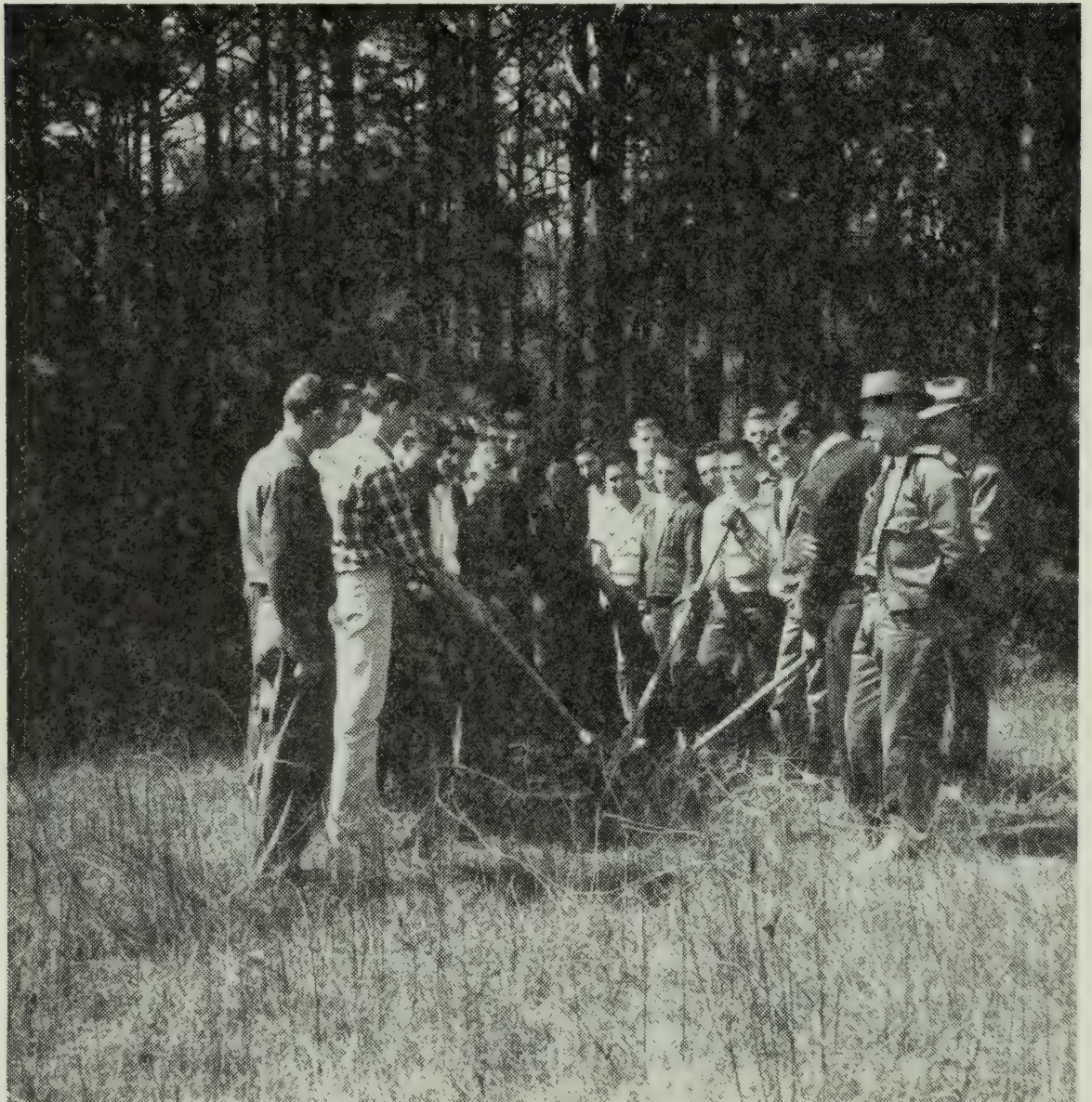
School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many vocational agriculture students have home forestry projects. They plow firebreaks, plant seedlings, thin a small area, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes. District Foresters and Rangers are available to assist vocational

agriculture classes with talks, demonstrations, and field work on forestry, and also provide filmstrips, motion picture films, booklets, posters, and other aids for teaching forestry.

Two workshops were held for vocational agriculture teachers during the year. Here teachers received instruction in forestry practices which could be used in their classroom and field projects.

The Forestry Commission sponsors an annual FFA and NFA Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1957-58 school year awards were presented to the winning FFA and NFA Chapters in each Vocational Agriculture District as follows:



A county ranger demonstrates forest fire suppression tools and techniques to a vocational agriculture class as they learn the steps in raising a good timber crop.

DISTRICT 1—FFA

- (1) Cleveland FFA Chapter

DISTRICT II—FFA

- (1) Fort Mill FFA Chapter
- (2) Monticello FFA Chapter

DISTRICT III—FFA

- (1) Blaney FFA Chapter
- (2) Gilbert FFA Chapter

DISTRICT IV—FFA

- (1) Ehrhardt FFA Chapter

DISTRICT V—FFA

- (1) McBee FFA Chapter
- (2) Bennettsville FFA Chapter

DISTRICT VI—FFA

- (1) Andrews FFA Chapter
- (2) Conway FFA Chapter

DISTRICT II—NFA

- (1) New Bethel NFA Chapter
- (2) Florence Chapel NFA Chapter

DISTRICT III—NFA

- (1) Hopkins NFA Chapter
- (2) Bethel NFA Chapter

DISTRICT IV—NFA

- (1) Voorhees NFA Chapter
- (2) St. Helena NFA Chapter

RESOURCE-USE EDUCATION

Commission personnel participated in a number of workshops for teachers during the year to stimulate the teaching of conservation at various grade levels in the schools of the state. Resource-use education workshops were held at the University of South Carolina, and at Clemson College during the year in which Commission personnel assisted with instruction in forestry, and the use of state park facilities.

In addition to the workshops mentioned above, forestry and state park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation.

The Resource-Use Education movement has stimulated interest in the out-of-doors as an aid to effective teaching, and provides an excellent opportunity for teaching conservation concepts.

TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and state parks before many groups. The quality of talks improved considerably during the year due to training, and the use of color slides with the talks undoubtedly made the talks much more interesting and more effective.

During the year a total of 280 talks were made by Commission personnel to 8,843 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. Foresters, Park Superintendents, Rangers, Wardens, Tractor Operators, Tower Operators, and other Commission personnel play an important part in the Commission's information and education program. As one example of the number of people reached, during the past year 24,185 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting, and preventing fires was usually explained or demonstrated.

EXHIBITS

The Forestry Commission welcomes requests by county fair organizations, garden clubs, church, school, and other groups for educational forestry and state park exhibits because they provide an excellent opportunity for placing forestry and state park information before the people.

The exhibits used are constantly being improved. Color and movement are being added to the exhibits where practicable in an effort to attract the attention of people and to get the message across.

Until the past several years an exhibit was rarely requested except for state and county fairs. During this year, garden clubs, banks and other groups requested exhibits regularly throughout the year. This is an indication of interest in forestry and state park activities by various groups of people.

State and county fairs, and gatherings other than fairs, present fine opportunities for displaying exhibits and for the dissemination of forestry and state park information through per-

sonal contacts by Commission personnel on duty and through the distribution of literature.

Exhibits were installed by Commission personnel at 110 locations and were seen by an estimated 1,434,989 persons.

The following is a record of where forestry and state park exhibits were displayed:

EXHIBITS AT STATE AND COUNTY FAIRS

Location of Exhibit—County Fair	Type of Exhibit	Estimated Attendance
Greenville	Fire Danger Station.....	34,000
Kingstree	Mr. Forest Farmer.....	3,000
Easley	SPCA—Forest Management.....	20,000
Bishopville	SPCA—Fire Prevention.....	12,000
Chesterfield	Gum Cross Section.....	5,000
Union	SPCA—Fire Prevention.....	25,000
Greenwood	Thinking Behind Fire Prevention in South Carolina	42,000
Marion	Fire Prevention.....	12,000
Rock Hill	Fire Danger Station	19,350
Orangeburg	Mr. Forest Farmer.....	10,000
Anderson	Planting Turntable.....	63,000
Anderson (N)	Planting Turntable.....	12,000
Camden	SPCA—Fire Prevention.....	14,000
Newberry	Thinking Behind Fire Prevention.....	16,000
Spartanburg	Parks, Fire Control & Forest Management.....	200,000
Chester	SPCA—Fire Prevention.....	3,700
Chester (N)	Management	2,400
Sumter	Three Steps to Prosperity.....	35,000
Laurens	Thinking Behind Fire Prevention In South Carolina	25,100
Lancaster	Gum Cross Section.....	12,000
Florence	Tower Cab and Murals.....	80,000
Manning	Automatic Slide Projector.....	3,000
Moncks Corner	SPCA—Fire Prevention & Econolite.....	2,700
Florence (N)	Tower Cab	50,000
Laurens	Thinking Behind Fire Prevention In South Carolina	25,000
Charleston	Gum Cross Section.....	35,000
Bamberg	SPCA—Fire Prevention.....	2,000
McCormick	SPCA—Fire Prevention.....	6,500
Loris	Automatic Slide Projector.....	6,000
Walterboro	Common Woods Exhibit.....	8,000
Sumter (N)	SPCA—Fire Prevention.....	35,000
Charleston (N)	Gum Cross Section.....	10,000
		828,750
State Fairs		
Columbia	Special Forest Tree Planting Exhibit and Rivers Bridge Museum Display.....	200,000
Columbia (N)	Special Forest Tree Planting Exhibit and Rivers Bridge Museum Display.....	90,000
		290,000

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

Camden (DuPont May Plant)—Park Map.....	850
Clemson (Farm & Home Week)—Fire Danger Management Station.....	4,000
Conway (Electric Fair)—Forest Management....	3,500
Columbia (St. Martins in the Fields)—Smokey Bear Suit.....	550
Bennettsville (Marlboro County Industry Appreciation Day)—Fire Prevention Float....	3,000
Barnwell (REA Exhibit)—Talking Smokey.....	2,500
Columbia (Fire Prevention Parade)—Charcoal and Smokey Bear.....	10,000
Georgetown (Timber Festival)—Charcoal for Parade and Murals.....	9,000
Columbia (Conference on Social Work)—State Park Exhibit & Location Map.....	1,000
West Columbia (Ruritan Club)—Smokey Bear Suit.....	50
Edgefield (Christmas Parade)—Smokey Bear Suit.....	10,000
North (PTA Community Fair)—Forest Management Exhibit.....	1,000
Darlington (Electric Fair)—Forest Management.....	15,000
Florence (Halloween Parade)—Smokey Bear Suit.....	15,000
Dillon (Fire Prevention Parade)—Smokey Bear Suit.....	5,000
Orangeburg (Chamber of Commerce Parade)—Smokey Bear Suit.....	5,000

Saluda (Parade)—Smokey Bear Suit.....	10,000
Johnston (Parade)—Smokey Bear Suit.....	10,000
New Ellenton (Parade)—Smokey Bear Suit.....	1,000
Aiken (School)—Smokey Bear Suit and Equipment.....	5,000
Dillon (Parade)—Float	10,000
Lexington (Parade)—Smokey Bear Suit and Equipment.....	4,000
Clemson House (Agri. Div. S. C. Bankers Assn.)—SPCA Hardwood Cont. Exhibit....	30
Union (Parade)—Smokey Bear Suit.....	10,000
St. Matthews (Parade)—Smokey Bear Suit.....	2,000
Florence (Parade)—Smokey Bear Suit.....	15,000
Columbia (Explorer Scouts at Epworth Orphanage)—Smokey Bear Suit, Smokey Bear Cutout, Posters and Murals.....	1,000
Rock Hill (Nature Museum)—Charcoal and Common Woods of South Carolina.....	650
Charlotte, N. C. (Carolina Lumber and Building Supply Association).....	2,477
Hampton (Watermelon Festival Parade).....	15,000
Walterboro (Women's Club)—Forestry and State Parks Exhibit.....	40
Columbia (Cub Scout Pack 314)—Smokey Bear Suit.....	25
Hampton (Watermelon Festival Parade)—Float—Highway Sign.....	10,000
Columbia (City Tree Department)—Insect and Disease Display.....	300
Burnt Gin Group Camp (Forest Mgt.—I & E Training School)— Cash In On A Good Deal.....	60
Camp Forest (Youth Conservation Camp)— Common Woods of S. C. and Gum Cross Section.....	107
Lancaster (Lancaster Hardware)—Be A Tree Farmer.....	3,000
Columbia (C. & S. Bank—5 Points Branch)—Forest Fire Prevention.....	15,000
Columbia (C. & S. Bank)—Forest Fire Prevention.....	15,000
Camden (Garden Clubs)—Common Trees of South Carolina.....	2,000
Camden (Burns and Barrett)—Common Diseases of S. C. Trees.....	2,000
Sumter (S. C. National Bank)—SPCA Management.....	10,000
Sumter (National Bank of S. C.)—Be A Tree Farmer.....	10,000
Sumter (Dean's Magneto & Electric)—SPCA Management.....	2,000
Pageland (Watermelon Carnival)—Smokey Bear on Tractor Truck.....	20,000
Darlington Bank & Trust Co.—Be A Tree Farmer.....	1,400
Peoples Bank of Hartsville—Be A Tree Farmer.....	1,400
S. C. National Bank of Dillon—Fire Prevention.....	5,000
Latta Bank & Trust Co.—Fire Prevention....	1,500
Depository of Lake View—Fire Prevention.....	1,500
Florence Agricultural Building—Forest Management.....	1,000
Pee Dee Bank of Timmons ville—Be A Tree Farmer and Fire Prevention.....	2,400
Citizens Bank of Marion—Fire Prevention.....	10,000
Production Credit Association, Bennettsville—Fire Prevention.....	3,200
Marlboro Trust Co., Bennettsville—Fire Prevention.....	3,600
Production Credit Association—Forest Management and Fire Prevention.....	6,000
Citizens State Bank of Bennettsville—Fire Prevention.....	1,200
S. C. National Bank of Georgetown—Forest Management.....	3,500
Smith's Grocery of Kingstree—Protection and Management.....	450
Swansea Fair—SPCA Fire Prevention.....	2,000
Swansea Parade—Smokey Bear Suit.....	2,500
Willoree Bank—Be A Tree Farmer.....	500
Graniteville Bank—Fire Prevention.....	500
North Augusta Bank—Be A Tree Farmer.....	750
Holly Hill Bank—Fire Prevention..	500
Denmark Bank—Forest Fire Prevention.....	500
Williston Bank—Forest Fire Prevention.....	500
Bank of Gaffney—Forest Management and Fire Prevention.....	400
Bank of Greer—Forest Management, Fire Prevention and Insect Display.....	1,000
Blue Ridge Bank of Walhalla—Management Display.....	150
Beaufort—Armed Services Parade.....	2,000
Charleston—Francis Marion Hotel—Management Exhibit.....	900
Charleston First National Bank—Management Exhibit.....	500
Estill Bank—Management Exhibit.....	150
Islandton Store—Management Exhibit.....	25
Colleton County Ag. Building—Forest Insect Display.....	75
Total	316,239
GRAND TOTAL	1,434,989

RADIO AND TELEVISION

Radio and television are valuable for getting forestry and state park information to large numbers of people.

Radio stations in South Carolina generously cooperated with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, as well as information on state parks.

Several districts have regularly scheduled programs on various radio stations. All districts have used radio to some extent. Many rangers use local radio stations to give warnings of periods of high fire danger, to give tips on how to prevent fires, and to present other information on forestry. Records show a total of 177 radio and TV programs on state parks and forestry were presented during the year, in addition to recorded spot announcements and recorded radio programs made available through the Cooperative Forest Fire Prevention Campaign.

During the year many radio stations broadcast programs produced as part of the nationwide Cooperative Forest Fire Prevention Campaign. Weekly programs featuring many well known artists and stars have proven popular enough to warrant repeat scheduling. Eddie Arnold, Billy Johnson, The Singing Woodsman and The Sons of the Pioneers, and Jelly Elliott are among the more popular singing stars. These programs combine hill-billy, western and folk music and stories and messages on forest fire prevention and on other phases of forestry. In addition, many radio stations used platters containing short forest fire prevention messages which were produced as part of the CFFPC program.

The "Ranger Parks" radio programs in nature, science, history, and conservation which were produced by the S. C. State Commission of Forestry for in-school listening, and which were originally broadcast by a number of radio stations in South Carolina were broadcast during the year by radio station WUSC-FM. This re-broadcast on the state's only non-commercial educational radio station, made the programs available for in-school listening by teachers and pupils in the Columbia area.

Commission personnel appeared on a number of television programs, and provided films, slides, and other materials on state parks and forestry for TV use. Motion picture film trailers featuring Smokey Bear were distributed to all TV stations in the state, and were widely used.

TRAINING

Every employee of the Forestry Commission has an important part in doing the information and education job. Because the Commission strives continually to improve its educational techniques and methods, a continuous training program is carried on. This has resulted in a better and more complete educa-

tional program. News releases are more readable and more interesting, radio programs are more effective, talks and slide lectures are more interesting and more effective. Fire control training stressed the fact that the forest fire prevention program and an expanded forest management program depend on the effectiveness of the selling job done by each member of the organization in his respective community.

State park personnel are continually aware that in order to serve the public and to promote an understanding and appreciation of the state parks program and its objectives, a continuing job of informing and educating park users is necessary. A part of the State Park Superintendents training meeting held each year is devoted to discussions and instruction in public relations and information and education activities to enable the state park program to better serve the three million visitors who use state park facilities each year.

NEWS RELEASES AND ARTICLES

Newspapers and magazines accepted and used much material prepared by personnel of the Commission on forestry and state parks. There is constant effort to furnish better quality photographs and written material for the editors. The material is also more acceptable to the readers because it is more readable and more interesting.

During the year Commission personnel prepared 692 news articles. This in no way gives the true picture of news coverage that the Commission received during the year. Many times, especially during fire situations, news items would be given orally to individual papers and to the wire services.

In addition to news releases, several feature articles on various phases of state parks and forestry were prepared. Pictures or prepared mats illustrating the story were usually sent with the feature.

During the year a number of special articles were prepared for magazines and other special publications to provide state park and forestry information to general and special audiences.

Forestry Commission personnel in every county of the state prepared news articles. In this way, news is localized, it makes better reading for the public, and is more acceptable to editors. The excellent press coverage has helped place forestry and state park news before the people more prominently than ever before.

BOYS' FORESTRY CAMP

The eleventh Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 26-31. Ninety young men representing every county in the state attended the week-long camp. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject "Why I Would Like to Attend Boys' Forestry Camp." On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and fun characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by state parks.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies, and other organizations, groups, and agencies who published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. In this way forestry and state park information is given widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop continued to produce routed letter signs, fair exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identified the various forestry and state park installations with the Commission of Forestry. The Commission's fair exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must have demon-



Tree Farming is big business in South Carolina. Tours and demonstrations encourage landowners to increase both the quantity and quality of wood products needed for our woodusing industries.

strated both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. His neighbors and others will see the sign and the good forestry practices and come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. The members of the S. C. Tree Farm Committee are:

Chairman—

Vern Cutler, Argent Lumber Company, Hardeeville

Members—

Joe Youorski, Champion Paper and Fibre Company, Newberry
Harvey Rhettberg, Poinsett Lumber and Mfg. Co., Pickens

H. F. Lathrop, Lightsey Brothers, Miley

H. F. Bishop, Consulting Forester, Marion

C. P. Key, Lodge

T. M. Folger, Taylor-Colquitt Company, Spartanburg

Charles H. Flory, State Forester, Columbia

George B. Nutt, Clemson Agricultural College, Clemson

James Chester, District Manager, AFPI, serves as Secretary to the State Tree Farm Committee.

As of June 30, 1958, there were 244 Tree Farms in the State comprising 1,504,011 acres.

Names of landowners certified during the past year are marked

with an asterisk on the following list of South Carolina Tree Farmers:

SOUTH CAROLINA TREE FARMERS

NAME—ADDRESS	Certified Tree Farm Acreage
Mrs. Walter C. White, Stateburg	5,500
McBride Dabbs, Mayesville	2,960
J. T. Johnson, Lynchburg	100
C. M. Leonard, Camden	5,500
D. G. Lesslie, White Oak Farm, Rt. 2, Rock Hill	205
Corey P. Key, Lodge	1,220
M. P. Howell, Jr., Route 1, Ruffin	2,400
Poinsett Lumber & Manufacturing Co., Pickens	68,451
C. E. Bullard, Early Branch	180
Wade C. Harrison, Rt. 2, Troy	3,400
W. D. Summer, Rt. 2, Newberry	70
J. C. Rich, Islandton	250
Dr. C. L. Stevens, Campobello	163
Frank E. Timmerman, Edgefield	400
Joe L. Tolbert, Ninety Six	4,050
Pegues Family, RFD, Bennettsville	1,700
F. E. Cox, Rt. 2, Bennettsville	1,300
Tilghman Lumber Co., Marion	11,399
A. H. Rogers & Sons, Society Hill	550
Benton D. Dargan, Rt. 3, Darlington	1,000
S. B. Huff, Rt. 2, Piedmont	75
G. L. Williamson, Rt. 1, Florence	800
Mrs. H. B. McCall, Effingham	1,000
Koppers Co., Inc., Wood Preserving Div., Charleston	9,474
E. B. Hare, Star Route, Westminster	60
Dixie Clay Co., Bath	1,912
John Tatum, Bamberg	300
J. F. Meares, Rt. 1, Nichols	200
H. N. Cousar, Rt. 1, Latta	500
Landon Thomas, 2226 Pickens Rd., Augusta, Ga.	515
J. R. Hawkins, Lykesland	110
Mrs. S. B. McMaster, 1900 Heyward St., Columbia 5	2,900
Mr. and Mrs. E. M. Harris, Bennettsville	275
S. J. Chandler, Minturn	400
J. B. Heins, Blythewood	85
J. Lamar Brantley, Manager, Good Hope Corporation, Ridgeland	12,000

NAME—ADDRESS	Certified Tree Farm Acreage
International Paper Co., Southern Kraft Division, George- town	366,438
Mrs. E. M. and McIver Williamson, Mont Claire	1,225
H. N. Slater (The Pine Tree Timber Co.), Ridgeland	1,000
George Roberts, Pineland	50
Oscar Wigington, Salem	2,940
Union Bag & Paper Corp., Savannah, Ga.	54,757
Fairfield Forest Products Co., Newberry	110,256
J. H. A. Carter, Lodge	200
Niles C. Clark, Waterloo	665
S. W. Mims, Route 1, Harleyville	1,600
A. W. Murray, 2203 Johnston St., Newberry	4,684
E. F. Conger, Box 149, Staunton, Va.	6,435
West Virginia Pulp & Paper Co.	20,398
West Virginia Pulp & Paper Company, Georgetown	364,331
Ferdinand Gregorie, Mt. Pleasant	525
F. W. Atkinson, Rt. 4, Augusta, Ga.	155
Duke Power Company, Charlotte 1, N. C.	61,500
R. C. Kinard, Islandton	1,155
Homer Saunders, Rt. 3, Walterboro	3,500
E. Heyward Benton, Rt. 4, Walterboro	75
E. D. Kinard, Islandton, S. C.	268
M. W. Wise, Elko	187
L. W. Anderson, Box 432, Williston	860
Graniteville Company, Graniteville	15,550
O. L. Warr, Rt. 2, Timmons ville	200
E. V. Golding, Waterloo	135
J. T. Squires, Rt. 3, Latta	285
D. H. Sullivan, Box 115, Lexington	149
Gair Woodlands Corp., Savannah, Ga.	65,683
C. A. Harper, Estill	4,000
Bruce Harter, Fairfax	450
Dunbar Oswald, Rt. 2, Allendale	700
Guy V. Whitener, College St. Extension, Newberry	1,847
Ben Alderman, Alcolu	1,680
G. T. Floyd, Manning	445
G. M. Bagnal, Rt. 3, Manning	40
M. Earl Stone, Rt. 1, Saluda	194
F. M. and M. S. Dwight, Eastover	144

NAME—ADDRESS	Certified Tree Farm Acreage
Olin J. Kinsler, Rt. 1, Columbia	205
A. J. Lever, Rt. 1, Columbia	112
J. D. Peeples, Early Branch	308
Kendall Mills—Wateree Division, Camden	450
James L. Sweat, Boykin	600
H. Gates Lloyd, Haverford, Pa. & Richard W. Lloyd, 1707 Lyttleton St., Camden	2,854
R. W. Lloyd, 1707 Lyttleton St., Camden	1,370
Cypress Woods Corp., Ridgeland	20,000
Brooks B. Weber, Rt. 5, Union	800
Holliday Brothers, Galivants Ferry	2,000
W. H. Manning, Jr., Barnwell	549
Toumey Hospital, Sumter	1,900
Mrs. E. R. Mobley, 607 Edisto St., Johnston	1,000
George Patrick, Bowman	700
Anthony Fogle, Neeses	146
Union Memorial Presbyterian Church, Rt. 1, Winns- boro	425
Thomas W. Timms, Rt. 1, Box 60, Winnsboro	400
Cragmoor Farms, Moore	1,100
J. P. Brunson, Sr., Darlington	468
Eastover School, Eastover	5
William H. Wicker, University of Tennessee, Knoxville, Tennessee	586
P. T. Harris, Silverstreet	200
William E. Senn, Newberry	135
G. B. Reagin Est., Rt. 4, Newberry	250
Dr. J. E. Grant, 1817 Lindsey St., Newberry	197
E. Guy Foster, McConnells	400
Charlton DuRant, Manning	229
E. E. Dargan, Conway	10,060
J. Porter Gaston, Richburg	155
J. T. Clinkscales, Rt. 1, Abbeville	370
Charles B. Abell, Lowrys	440
Dr. Stanley C. Baker, Greenwood	100
Misses Nora and Mae Davis, Troy	181
W. R. Cothran Estate, 312 Grace St., Greenwood	490
J. Hearst Coleman, 248 Jennings Ave., Greenwood	400
Frank J. Wideman, 1366 National Press Bldg., Wash- ington, D. C.	273

NAME—ADDRESS	Certified Tree Farm Acreage
C. Cooper Sanders, Jr., and Howard P. Mabry, Greenwood	106
David Dows, Bradley	1,100
Henry G. Ligon, Rt. 2, Easley	24
J. B. Guess, Jr., Denmark	1,000
W. W. Woolsey, Montmorenci	500
Samuel H. Swint, Graniteville Company, Graniteville	327
Mrs. Margaret H. Lloyd, Camden	800
Mrs. V. T. Chastain, Box 897, Hampton	317
Willie Reed Bishop, Rt. 4, Walterboro	100
R. C. DeLoach, Furman	405
Mrs. Annie M. Pinckney, 1006 Henderson St., Columbia	250
C. J. Cate, Jr., 129 S. Waccamaw, Columbia	455
John C. Billingsley, 924 Fair St., Newberry	111
J. Roy Cunningham, Rt. 6, Lancaster	300
Clyde D. Ware, Rt. 2, Iva	48
H. F. Bishop and C. H. Schaeffer, 316 Woodland Drive, Marion	43
Vance Perritt, Mullins	60
F. C. Edge, Mixonville	95
A. D. Strickland, Rt. 3, Loris	100
H. L. Bellamy, Wampee	25
J. M. Huber Corp., Langley	1,854
J. Ansel Caughman, Rt. 2, Leesville	1,200
G. E. King, McBee	950
R. D. King, McBee	270
Marlin H. Bruner and W. C. Nettles, Clemson	415
Marlin H. Bruner, Clemson	104
A. C. Flora, 1511 Hagood Ave., Columbia	204
St. Clair Davis, Marion	250
Frank H. Covington, 311 Fayetteville Ave., Bennettsville	100
Helen S. Tiencken, 4009 Fessenden St., N. W., Washing- ton 16, D. C.	297
Stewart C. Hope, Agent, 3350 Millwood, Box 5054, Columbia	505
Dr. R. N. Kennedy, 15 E. Jones Street, Savannah, Ga.	264
Mrs. Sarah Goggans, Newberry	562
T. C. Jeter, 252 Sims Ave., Columbia	108
Dr. W. G. Gamble, Jr., 2010 Fifth Avenue, Bay City, Michigan	842

NAME—ADDRESS	Certified Tree Farm Acreage
J. L. Mason, Clarks Hill	1,211
Atlantic Coast Line RR Co., Wilmington, N. C.	376
W. H. Bradford, Rt. 4, Sumter	200
H. M. Hentz & Son, Box 181, Newberry	8,434
Hampton & Branchville RR Co., Inc., Hampton	4,902
Edward Duckworth, 1126 Douglas St., Newberry	44
Horace T. Oxner, Rt. 2, Saluda	107
Vance & Dwiggins Co., Newberry	783
Argent Lumber Co., Hardeeville	5,888
J. T. Strahan Co., Port Wentworth, Ga.	1,655
Lightsey Bros. Lumber Co., Miley	39,584
Dr. and Mrs. Carnes Weeks, Mt. Holly	6,410
Hubert Boyd, Clinton	873
J. B. Frazier, Jr., and J. B. Frazier, III, Winnsboro	669
T. B. Amis, Box 71, Newberry	650
Mrs. T. A. Black, Sr., Rt. 2, Box 2, Ruffin	1,131
Bess Caldwell Bursinger, 2006 Luther St., Newberry	506
Albert G. McCaughrin, 1208 Calhoun St., Newberry	38
B. Hardin Keitt, 200 Hassel Place, Charlotte 7, N. C.	874
J. Peter Grace, Jr., 7 Hanover Square, New York, N. Y.	12,700
R. L. Fairey, Jr., Rowesville	121
Dr. M. D. Farrar, 129 Folger St., Clemson	168
Thomas D. and Christine M. Hinkle, Sunset	225
Stiles M. Harper, Estill	2,654
Guy V. Whitener, Jr., E. Wells Park Drive, Newberry	389
Luke Winchester, Sunset	2,846
J. B. Frazier, III, Winnsboro	180
Dr. G. W. Cunningham, Laurens	114
G. S. Carter, Jr., Heriot St., Charleston 31	1,183
Floride M. and William Glover, Willowbank, Georgetown	70
Atlantic Cresoting Co., Inc., 17 Battery Place, New York 4, N. Y.	3,764
Vestal Lbr. & Mfg. Co., Knoxville, Tenn.	5,922
W. W. Smith, Andrews	4,482
R. J. Makela, 530 W. Church St., Bishopville	697
D. L. Brown, 118 Harvard Drive, Spartanburg	89
Sam Hardin Smith, Rt. 3, Loris	290
Flack-Jones Lumber Co., Inc., Moncks Corner	3,200
J. D. Martin, Box 395, Summerville	300

NAME—ADDRESS	Certified Tree Farm Acreage
C. Hutt Shelley, Nichols	433
Robert Kennerley, Newberry	65
R. M. Cooper & Archie Beattie, Wisacky	628
Est. of Susan Guignard (R. Sanders Guignard, Trustee), Parkland Inc., Cayce, S. C.	2,760
Phillip R. Freeman, Oakland, Calif.; Mrs. E. C. Coker, Clemson; Mrs. B. W. Porter, New Orleans, La.	4,819
Porcher G. Rembert, Rt. 2, Box 45, Sumter	100
H. Chr. Sonne, 15 Exchange Place, Jersey City 2, N. J.	9,500
Ellis Est. (H. H. Ellis, Agent), Rt. 5, Saluda	100
James Bledsoe, RFD, Saluda	15
H. T. Anderson, Macon, Ga.	410
Wade Hampton Cobb, 1215 Anthony Ave., Coulmbia	70
Weyman Coleman, Rt. 5, Saluda	1,000
Calvin Rivers, Chesterfield	1,700
H. W. Merck, Rt. 2, Bishopville	166
Robt. J. Maxwell, Jr., 239 N. Main St., Greenville	80
Dr. L. W. Anderson, Williston	1,200
W. C. Ellis, Jr., Rt. 4, Abbeville	291
Holly Hill Lbr. Co., Holly Hill	11,270
O. H. Wienges & Son, St. Matthews	2,437
Miss Stella M. Ruff, Jenkinsville	72
B. F. Williamson, Rt. 3, Darlington	1,700
Dr. W. T. Martin, 605 McDaniel Ave., Greenville	125
*William A. Douglas, Georgetown	33
*Leger R. LaBruce, Georgetown	66
*Norman G. Sifly, Orangeburg	120
*Fred Norris, Eutawville	495
*A. B. Chace & M. G. Chace, Jr., Providence, R. I.	9,224
*A. B. Chace, Providence, R. I.	2,577
*Ben R. Wall Jr., Chester	724
*James A. Burden, Aiken	3,333
*J. Cecil Berly, Pomaria	460
*Raymond Booth, Aynor	60
*S. A. Cooler, Walterboro	1,311
*Boyd Jacobs, Georgetown	125
*M. H. Jacobs estate, Kingstree	1,988
*Roscoe M. Hinson, Kingstree	534
*P. T. Mace, Gresham	1,797

NAME—ADDRESS	Certified Tree Farm Acreage
*T. C. Coxe, Jr., Darlington	17,500
*Robert Nichols, Conway	185
*Mrs. L. Jennie Cottingham, Dillon	341
*F. R. Hemingway, Kingstree	87
*Clyde Booth, Conway	288
*Miss Rebecca Bryan, Conway	992
*Mrs. Oline W. Smith, Georgetown	23
*Canal Wood Corp., Conway	1,620
*Paul & E. B. Sanders, Ritter	3,943
*J. L. Aiken, Pickens	42
*J. H. Fair, Jr., St. Matthews	610
*Jacob R. Rogers, Dillon	408
*Lucas M. Dargan, Darlington	110
*W. E. & L. M. Dargan, Darlington	420
*Dr. A. M. Rose, Jr. and Lucile R. Deal, Marion	513
*Dixon Tire Service, Lancaster	210
*Miss Virginia Gourdin, Charleston	674
*B. A. Fretwell, Newberry	150
*Carolina Tree Farms, Inc., Newberry	552
*J. W. Yonce, Jr., Johnston	150
*Randolph Watson, Anderson	925
*Don Watson, Blaney	42
*B. W. Crouch, Saluda	120

STATE PARKS

INTRODUCTION

Visitation to the state park areas of South Carolina continued at a rate of slightly more than 3 million users per year. For the fiscal year 1957-58 the count recorded 3,069,393 visitors to the 20 white areas and the 5 areas for Negro use in the 21 state parks in operation.

The continued heavy use of the state parks indicates the increasing interest in the out of doors and the natural features of the areas, for there have been no capital expansions or improvements to attract visitors.

Sesqui Centennial and Myrtle Beach had the heaviest use when more than 400,000 park patrons visited these areas; parks in the 200,000 category were Cheraw, Hunting Island, Kings Mountain, Paris Mountain, Poinsett, and Table Rock. Among the state parks for Negroes, the Hunting Island area had the largest attendance of over 50,000; followed by Pleasant Ridge and Mill Creek.



Cool water and ocean breezes help provide real vacation enjoyment at Myrtle Beach State Park, one of South Carolina's 21 state parks.

There were still more picnickers in the parks than any other designated use; with a million-and-a-quarter men, women, and children spreading a lunch under the trees or grilling a meal over an open fire. The swimming areas saw more than 600,000 enjoying water recreation and sunbathing. Overnight use included vacation cottages, organized group camps and tent and trailer family camping.

There is a large nationwide build-up in family camping. Tent and trailer areas are being enlarged to accommodate the increasing demand. This year was the heaviest yet, with 159,103 individual camper-days in these camping areas. Myrtle Beach alone had 47,000 camper-days.

The parks are experiencing another type of use that is highly acceptable—that of schools and other organized groups. These students of conservation are finding that the woods and waters of the state parks offer excellent “laboratories” for their studies and explorations.



Training of State Park Superintendents includes the many problems of maintaining attractive, well kept parks as well as personal relations with the public.

APPROPRIATIONS

The appropriation for the operational budget for the fiscal year was \$339,416. This is about \$50,000 less than actual needs. Consequently, there is being created a back-log of delayed maintenance that will someday have to be corrected by major construction, or the facilities must be abandoned. The operational cost of South Carolina state parks amounts to about 11 cents per park visitor, while the national average is 19 cents.

There was no appropriation for capital expansion.

FAMILY VACATION CABINS

The table below shows the distribution of family vacation cabins, with number and rentals in-season and out of season.

PARK—COUNTY	Cabins	Weekly	Out-of-Season Week-end
Cheraw—Chesterfield	9	\$24—\$36	\$ 9—\$15
Edisto Beach—Charleston	5	Closed	.....
Givhans Ferry—Dorchester	5	\$24	\$ 9
Hunting Island—Beaufort	4	\$42	\$18
Myrtle Beach—Horry	5	\$42	\$18
Oconee — Oconee	20	\$20—\$36	\$ 8—\$15
Poinsett — Sumter	6	\$24—\$42	\$ 9—\$15
Santee — Orangeburg	2	\$28	\$12
Table Rock—Pickens	12	\$24—\$44	\$10—\$24

Facilities for Negro Families:

Hunting Island—Beaufort	2	\$35	\$12.50
Pleasant Ridge—Greenville	2	\$35	\$12.50

All cabins have electric lights, electric stoves, and electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin-user must bring blankets, bed linens and towels, and silverware, such as knives, forks and spoons, as these are not included.

During the period June 1st through Labor Day summer rates are effective and cabins are rented for a period of one week only. After Labor Day and through the following May cabins are available at reduced rates and for week-end use. Many cabins are winterized and comfortable throughout the year.

To give every family an equal opportunity to obtain a cabin for a summer vacation, assignments are made as a result of a public drawing. All South Carolina applications are considered first; then out-of-state requests are reviewed.

GROUP CAMPS

The seven group camps—six for white and one for Negro campers—are located as follows:



Group Camp facilities at four state parks provide wonderful opportunities for wholesome camping experiences for Scouts, churches, conservation organizations and other groups.

<i>State Park</i>	<i>Camp</i>	<i>Capacity</i>	<i>Rental</i>
Cheraw	Forest	140	35c per day per person
	Juniper	68	35c per day per person
Kings Mountain	York	140	35c per day per person
	Cherokee	102	35c per day per person
Poinsett	Burnt Gin	60	35c per day per person
	Mill Creek*	60	35c per day per person
Paris Mountain	Buckhorn	42	35c per day per person

*For Negro use only.

Equipment and facilities are similar in all camps. The camps are used throughout the vacation season without any vacancies. Out-of-season use is spotty, as facilities are not adapted to winter use.

TABLE OF TENT AND TRAILER AREAS

Park Location	F A C I L I T I E S								
	No. of Units	Flush Toilets	Showers	Electric Connections	Water Connection	Outdoor Grill	Picnic Tables	Miles to Gas and Grocery	Other Facilities
AIKEN—18 miles E. Aiken.....	4	*	*	X	X	X	X	3	1 2 3 4
BARNWELL—3 miles S. Blackville.....	8	X	*	X	X	X	X	2	1 2 3 4
CHERAW—4 miles S. Cheraw.....	12	X	X	X	X	X	X	2	1 2 3 4
CHESTER—3 miles SW Chester.....	6	X		X	X	X	X	2	2 3 4
COLLETON Wayside—12 mi. N. Wal'boro	4	X		X	X	X	X	1	2
HUNTING ISLAND—16 miles E. Beaufort	36	X	*	X	X		X	4	1 2
KINGS MOUNTAIN—12 miles N. York....	10	X	X	X	X	X	X	1	1 2 3 4
MYRTLE BEACH—3 miles S. Myrtle Beach	150	X	X	X	X		X	2	1 2
OCONEE—8 miles NW Walhalla.....	20	X	*	X	X	X	X	2	1 2 3 4
POINSETT—18 miles SW Sumter.....	9	X	X	X	X	X	X	9	1 2 3 4
SANTEE—5 miles W. Santee....	4	X	*	X	X	X	X	4	1 2 3 4
TABLE ROCK—16 miles N. Pickens.....	26	*	*	X	X	X	X	4	1 2 3 4

SYMBOLS: * — Available at Bathhouse
 1 — Swimming
 2 — Fishing
 3 — Boating
 4 — Hiking and Trails

A “Unit” is a space designed to accommodate from two to six people.

Camping areas are “open” from 8:00 A. M. to 10:00 P. M. the year around.

Pets must be kept on leash. No advance reservations.

CHARGES: Camping charges at above parks \$1.00 per day except at Myrtle Beach and Hunting Island which is \$1.25 per day, per unit. Limited camping facilities are available at 10 other State Parks at a cost of \$0.50 per day.

STATE PARK ACQUISITION AND DEVELOPMENT

It is interesting to record the statistical history of the acquisition, development, size and location of the several areas comprising the South Carolina state park system.

Since the first acquisition in 1934—Cheraw in March of that year—the complete list follows:

The 22 state parks, with their acreage, location, date of establishment or acquisition, and date opened to visitors, are shown below:

Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken	1,667	Aiken ..	July 1934	Aug. 1936
Andrew Jackson Historical..	360	Lancaster	April 1953	Mar. 1957
Barnwell	367	Barnwell	July 1937	Aug. 1939
Cheraw	7,361	Chesterfield	Mar. 1934	July 1939
Chester	523	Chester	May 1935	July 1939
Croft	7,135	Spartanburg	May 1949	June 1949
Edisto	1,255	Charleston Closed Feb. 1956....	Feb. 1935	June 1937
Givhans Ferry	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood	914	Greenwood	April 1938	July 1940
Hunting Island	5,000	Beaufort	July 1938	June 1941
Kings Mountain	6,141	York-Cherokee	Nov. 1934	June 1940
Lee	2,839	Lee	June 1935	June 1941
Little Pee Dee.....	835	Dillon	June 1951	June 1955
Myrtle Beach	312	Horry	Aug. 1934	July 1936
Oconee	1,165	Oconee	July 1935	June 1937
Paris Mountain	1,275	Greenville	April 1935	June 1937
Pleasant Ridge	300	Greenville	Sept. 1950	June 1955
Poinsett	1,000	Sumter	Aug. 1934	Aug. 1936
Rivers Bridge	390	Bamberg	May 1945	July 1945
Santee	2,364	Orangeburg	Jan. 1942	June 1949
Sesqui-Centennial	1,500	Richland	Aug. 1937	June 1940
Table Rock	2,860	Pickens	May 1935	June 1940
46,138				

SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Out Door Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps †	Museum	Trailer & Tent Camping ‡
Aiken Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x			x
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x	
BARNWELL Blackville, S. C.	x	x	x	x	x	x	x				x		x		x			x
CHERAW Cheraw, S. C. { White Area.	x	x	x	x	x	x	x	x			x		x	x	x	x		x
{ Negro Area.	x	x		x	x	x	x						x					x
CHESTER Chester, S. C.	x	x				x	x				x				x			x
CROFT Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x			
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																		
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x			
GREENWOOD Ninety Six, S. C., RFD. { White Area.	x	x	x	x	x	x	x						x		x			
{ Negro Area.	x	x				x	x											
HUNTING ISLAND Frogmore, S. C. { White Area.	x	x		x	x		x	x				x	x		x			x
{ Negro Area.	x	x		x	x		x	x					x					
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x		x
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x			
LITTLE PEE DEE Dillon, S. C.	x	x	x	x	x	x	x											
MYRTLE BEACH Myrtle Beach, S. C.	x	x		x	x		x	x		x	x		x		x			x
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x		x			x
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x		
PLEASANT RIDGE (For Negroes) Cleveland, S. C.	x	x		x	x	x	x	x					x					
POINSETT Wedgefield, S. C. { White Area.	x	x	x	x	x	x	x	x				x	x		x	x		x
{ Negro Area.	x	x		x	x	x	x						x			x		
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x		x	
SANTEE Elloree, S. C., RFD.....	x	x		x	x	x	x	x					x		x			x
SESQUI-CENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x			
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x			x

* Where no regular barbecue pit and shelter are established, temporary arrangements can be made at all Parks.

† Two camps each at Cheraw, Kings Mountain and Poinsett.

‡ Where no developed camping areas are established, temporary arrangements can be made at all parks.

S. C. STATE COMMISSION OF FORESTRY—DIVISION OF STATE PARKS
SUMMARY OF STATE PARKS USE—JULY 1, 1957 - JUNE 30, 1958

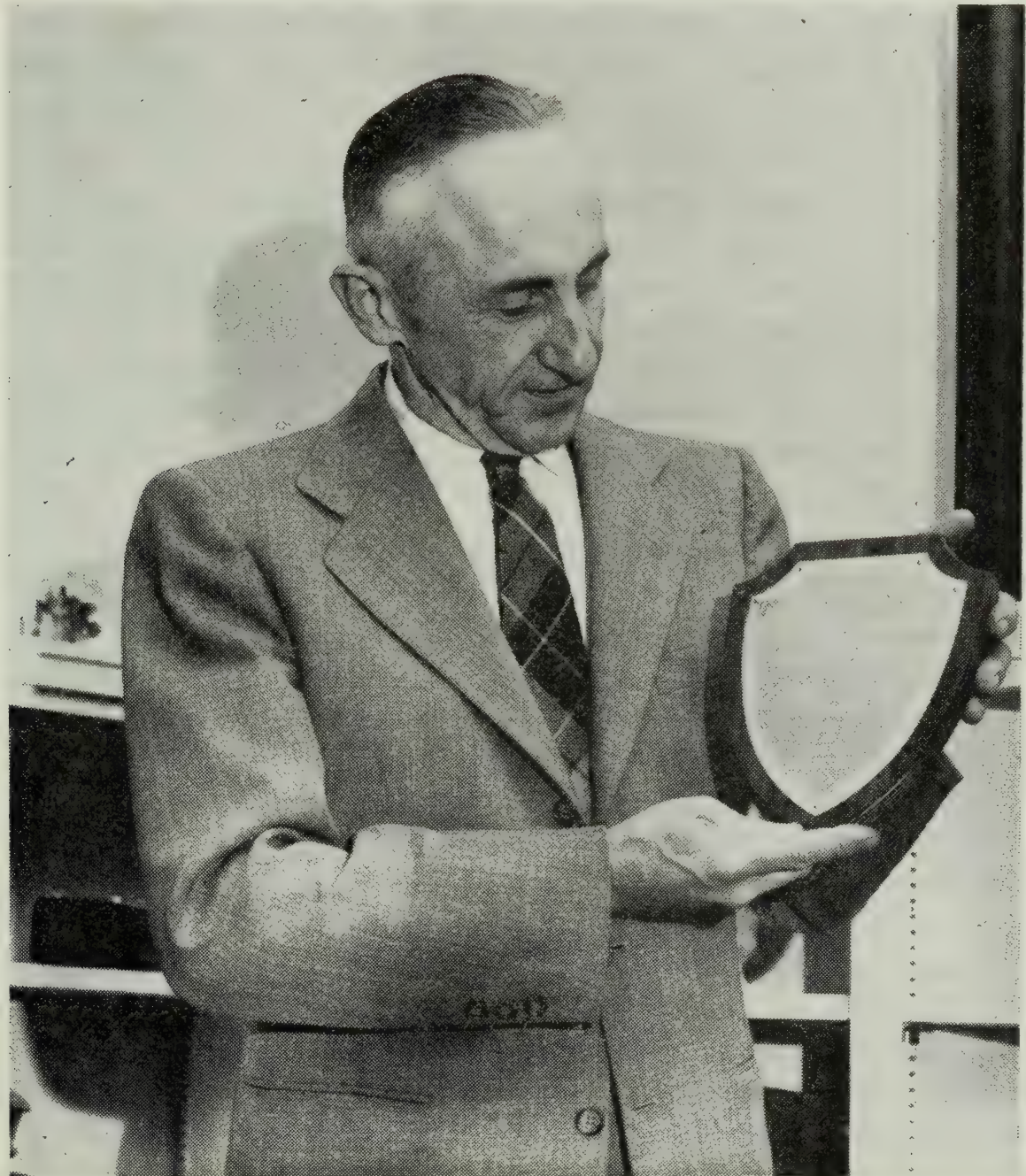
NAME OF PARK	Cabin Days Occupied	Cabin Occupants	Group Camps	Tents and Trailers	Fishermen	Picnickers	Swimmers	Out-of-State Cars	Total Cars	Total Visitors
Aiken	66	406	190	135	624	23,192	4,585	384	12,417	38,737
Andrew Jackson .....	...	...	...	...	...	6,136	...	1,530	5,766	16,651
Barriwell .....	...	...	33	397	907	55,520	9,449	487	18,710	83,711
Cheraw	523	3,541	16,523	4,685	2,760	69,444	69,389	11,319	42,660	189,653
Campbells Lake (N) .....	...	...	...	...	399	5,687	3,441	1,128	2,768	13,380
Chester .....	...	...	...	149	1,617	17,372	...	1,731	13,348	53,376
Croft .....	...	...	1,559	145	...	31,253	43,637	188	27,501	109,839
Edisto .....	...	...	...	...	...	...	...	...	...	...
Givhans Ferry	224	1,442	...	741	...	32,855	12,870	796	13,480	54,368
Greenwood .....	...	...	...	947	9,755	60,885	8,869	812	36,645	136,425
Greenwood (N) .....	...	...	...	...	750	6,255	...	...	3,450	13,260
Hunting Island	717	3,741	...	3,473	23,608	66,628	64,628	13,824	50,193	200,074
Hunting Island (N)	53	316	...	...	2,115	20,284	11,281	2,938	9,330	50,209
Kings Mountain .....	...	...	16,387	1,301	1,226	55,527	14,881	27,896	41,130	180,311
Lee	19	93	...	630	1,210	14,025	11,169	350	13,235	52,900
Little Pee Dee .....	...	...	431	646	3,207	29,991	10,691	1,670	15,910	48,454
Myrtle Beach	763	4,524	...	47,732	31,836	38,711	56,180	31,813	95,276	402,875
Oconee	1,092	11,137	120	2,088	...	52,032	48,385	1,514	25,709	130,018
Paris Mountain .....	...	...	4,788	1,120	...	110,726	34,726	1,204	62,029	247,593
Pleasant Ridge (N)	34	203	...	90	...	13,146	1,368	345	5,417	25,074
Poinsett	317	2,458	5,292	1,289	883	71,138	25,895	3,990	47,922	175,649
Mill Creek (N) .....	...	...	2,797	80	145	9,918	11,507	137	5,303	27,258
Rivers Bridge .....	...	...	...	199	905	20,083	13,060	298	11,341	43,522
Santee	218	1,174	30	987	9,585	30,692	13,572	1,435	17,625	74,210
Sesqui-Centennial .....	...	...	...	1,019	...	295,233	82,992	22,374	116,912	493,203
Table Rock	1,247	7,374	...	6,615	53	116,861	45,921	2,208	44,978	174,030
Colleton .....	...	...	...	74	...	17,195	2,039	3,870	9,690	34,616
TOTALS	5,273	36,409	48,150	74,542	91,585	1,270,789	600,535	134,241	748,745	3,069,393

(N) State Park for Negroes.

ADMINISTRATION

INTRODUCTION

The Commission's Administration Branch is responsible for coordinating the activities of both central and field offices on fiscal and accounting, property and supply, and personnel and office services for both Divisions of the Commission—Forestry and State Parks.



State Forester Charles H. Flory, recipient of the 1957 Achievement Award of the Appalachian Section of the Society of American Foresters, in recognition of his abilities and accomplishments in forestry.

SUMMARY

State appropriated funds for salary increases and adjustments averaging 10% to all personnel were provided; however, losses of both technical and other personnel continued at an excessive rate. A total of 54 employees resigned during the year of which 73% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and Park program \$2,886,316.68. Of this total the division of Forestry expended \$2,445,572.63 and the division of State Parks \$440,744.05 (see Appendix for detailed explanation of funds available and expenditures made). State appropriated funds amounted to \$1,537,788 for the division of Forestry and \$338,467 for the division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 56 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 10 accidents. Of the 10 accidents which occurred, only 4 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and the assistance of the National Safety Council.

The Commission instituted a safe driving program sponsored by the National Safety Council several years ago. Under this program a driver must operate a vehicle on official business for twelve consecutive months without a preventable accident before entitled to the first year safe driving award. If a preventable accident occurs during the first three years or before the third year award has been received, the driver's safe driving record is canceled and he is required to begin again. Should a preventable accident occur after the third year award is received, the driver

is penalized and is requested to operate for twelve additional months from date of accident before entitled to the next year award.

A review of the Commission's employees' safe driving records indicate the 135 of the 353 drivers have operated Commission or privately owned vehicles on official business for a period of one to five years without an accident; 83 for six to ten years; 96 for eleven to fifteen years; 39 for sixteen years and over.

COMMISSION PURCHASING

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and simplifying fiscal procedure. A total of 1,498 requisitions were received and 1,303 purchase orders were issued during the year.

Visual inventories were made during the year of all equipment in use by the Commission. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,638,574. In addition, the Commission has real property and improvements now estimated to be worth \$13,049,245.

PERSONNEL

A large number of Commission employees continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Ten percent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

PERSONNEL LOSSES**Division of Forestry****Resignations—1957-1958**

Foresters	4
Assistant, Fire Control Equipment and Towers.....	1
Forestry Aides	2
	—
Technical	7
Clerk-Stenographers	9
Foremen	3
Rangers	1
Wardens	10
Towermen	8
Tractor Operators	7
HSU Operator	1
	—
Non-Technical	39
	—
Total Resignations	46
Losses Due to Promotions or Change in Positions	
District Forester	1
Forester	1
Forestry Aide	1
	—
Technical	3
	—
Total Losses, Division of Forestry.....	49

Division of State Parks
Resignations—1957-1958

Payroll Clerk	1
Superintendent	1
Asst. Maintenance Mechanic	1
Rangers	2
Foreman	1
Truck Driver	1
Laborer	1
	—
Total	8
Losses Due to Promotions or Change in Position	
Superintendent	1
Foreman	1
	—
	2
	—
Total Losses, Division of State Parks.....	10
	—
Grand Total—Personnel Losses.....	59

APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1957-June 30, 1958

RECEIPTS

Division of Forestry:

Balance from 1956-57—Radio Comm. Fund.....	\$ 3,408.36
Balance from 1956-57—Federal Fund.....	64,967.79
Balance from 1956-57—Coastal Nursery— Special	19,900.00
Balance from 1956-57—Nursery Notes and Interest	782.74
State Appropriation—Operating	1,439,288.00
State Appropriation—Increased Production Seedlings	98,500.00
Federal Funds—Protection C-M Law, Sec. 2....	—278,600.00
Federal Funds—Reforestation C-M Law, Sec- tion 4 and N-D	58,235.95
Federal Funds—Cooperative Forest Management	47,281.17
Federal Funds—12 Mile and Coneross Creeks Watersheds	38,243.62
Federal Funds—Agricultural Stabilization.....	14,386.27
Federal Funds—Conservation Program	257,809.60
Federal Funds—Seed Bank.....	59,995.00
Nurseries	178,506.22
Counties and Timber Firms.....	9,531.19
State Forests	59,758.63
Marking and Tallying Timber.....	7,335.87
North Carolina Seedlings.....	17,800.00
Miscellaneous	329.09
Radio Communications	2,093.47
Total Receipts—Forestry.....	\$2,656,752.97
Less Receipts Deposited to Cr. State Revenue Account	172,553.93
Total Receipts Available for Expenditure.....	2,484,199.04
Total Expenditures	2,445,572.63
Balance—Division of Forestry.....	\$ 38,626.41*

Division of State Parks:

Balance from 1956-57—Forests & Parks Fund	\$ 3,648.14
Balance from 1956-57—Parks Notes and Int.....	1,747.42
Balance from 1956-57—Parks Improvements.....	21,168.47

Balance from 1956-57—M. B. Fishing Pier.....	2,486.95	
State Appropriation—Operating	335,416.00	
State Appropriation—Historical Areas.....	3,051.00	
State Appropriation—Burned Building, Cheraw Park	4,000.00	
Forests and Parks Fund—Hunting Island Deposits	1,530.00	
Myrtle Beach Fishing Pier.....	42,183.83	
Myrtle Beach Swimming Pool.....	15,126.50	
Cabin Rentals	28,412.83	
Concession Stands	3,832.67	
Bathhouse and Swimming.....	44,696.49	
Boat Rentals	3,058.50	
Picnic Shelters, Recreation Buildings and Trailer Camps	11,501.86	
Group Camps	11,759.13	
Miscellaneous	887.92	
Hunting Island Grill	2,175.00	
<hr/>		
Total Receipts—Parks		536,682.71
Less Receipts Deposited to Cr. State Revenue Account		71,942.83
<hr/>		
Total Receipts—Parks Available for Expendi- ture		464,739.88
Total Park Expenditures		440,744.05
<hr/>		
Balance—Division of State Parks.....		23,995.83†

EXPENDITURES

Administrative and Technical	\$ 569,663.10	
State Forest Nurseries	604,603.66	
State Forest Projects	62,355.08	
Fire Protection	1,142,634.97	
Payments on Loan for New Nursery.....	53,144.00	
Chesterfield, Richland and Sumter Counties — 25% Receipts from State Forests.....	13,171.82	
<hr/>		
Total—Division of Forestry.....		2,445,572.63
Total—Division of State Parks		440,744.05
<hr/>		
Grand Total—Expenditures		\$2,886,316.68

RECAPITULATION

Funds Available:

Division of Forestry	\$2,484,199.04	
Division of State Parks	464,739.88	
	<hr/>	2,948,938.92

Expenditures:

Division of Forestry	\$2,445,572.63	
Division of State Parks	440,744.05	
	<hr/>	2,886,316.68

Balance		62,622.24†*
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***Forestry:**

Federal Fund	\$ 38,521.55
Nursery Notes and Interest	51.04
Radio Communications	53.82

†Parks:

Hunting Island Deposits	\$ 2,868.98
Parks Improvements	17,014.06
M. B. Fishing Pier	2,966.67
M. B. Swimming Pool	1,146.12
	<hr/>
	\$ 62,622.24

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1957-58

UNIT	Organized Personnel					Volunteer Personnel	Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	..	1	4	73	77
Aiken	1	4	2	5	12	286	298
Allendale	1	2	1	3	7	58	65
Anderson	1	2	1	3	7	101	108
Bamberg	1	2	1	2	6	123	129
Barnwell	1	2	2	2	7	76	83
Beaufort	1	3	2	3	9	90	99
Berkeley	1	4	2	4	11	394	405
Calhoun	1	2	1	2	6	65	71
Charleston	1	4	3	3	11	233	244
Cherokee	1	1	..	1	3	109	112
Chester	1	3	1	1	6	95	101
Chesterfield	1	3	1	4	9	149	158
Clarendon	1	3	2	3	9	290	299
Colleton	1	4	3	5	13	460	473
Darlington	1	2	..	3	6	245	251
Dillon	1	2	1	2	6	53	59
Dorchester	1	4	2	3	10	86	96
Edgefield	1	2	1	1	5	32	37
Fairfield	1	4	1	3	9	49	58
Florence	1	4	2	4	11	213	224
Georgetown	1	4	2	4	11	190	201
Greenville	1	3	1	4	9	439	448
Greenwood	1	2	1	2	6	106	112
Hampton	1	3	1	3	8	117	125
Horry	1	5	2	4	12	266	278
Jasper	1	3	2	2	8	256	264
Kershaw	1	3	2	6	12	105	117
Lancaster	1	3	1	2	7	91	98
Laurens	1	3	1	2	7	122	129
Lee	1	2	1	3	7	126	133
Lexington	1	3	2	5	11	173	184
Marion	1	3	2	3	9	148	157
Marlboro	1	3	2	3	9	97	106
McCormick	1	1	1	1	4	43	47
Newberry	1	2	1	2	6	63	69
Oconee	1	2	1	3	7	123	130
Orangeburg	1	5	2	5	13	245	258
Pickens	1	3	1	4	9	99	108
Richland	1	5	2	4	12	231	243
Saluda	1	2	..	1	4	22	26
Spartanburg	1	3	1	4	9	124	133
Sumter	1	3	1	3	8	283	291
Union	1	2	1	1	5	16	21
Williamsburg	1	5	2	4	12	546	558
York	1	2	1	4	8	186	194
Total	46	134	63	137	380	7,497	7,877

TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1957–JUNE 30, 1958

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July	112	4.3	349.7	3.1
August	139	5.4	526.6	3.8
September	45	1.7	217.0	4.8
October	33	1.3	99.2	3.0
November	142	5.5	762.7	5.4
December	240	9.3	1,614.5	6.7
January	273	10.5	1,511.3	5.5
February	725	28.0	7,329.0	10.1
March	437	16.9	4,408.8	10.1
April	291	11.2	2,546.5	8.8
May	76	2.9	500.9	6.6
June	77	3.0	386.8	5.0
Totals	2,590	100.0	20,253.0	7.8

UNIT	Sawmills		Mills		Campers		Smokers		Burning		Incendary		Lumbering		ous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	2	6.1	2	2.7	2	13.1	1	10.2	2	38.4	..	..	1	9.9	..	..	10	80.4
Aiken	5	14.3	1	3.6	2	17.8	28	190.0	25	123.5	14	68.3	..	..	31	113.5	106	531.0
Allendale	..	..	4	22.0	..	..	15	113.7	12	131.7	1	2.5	3	26.0	1	5.0	36	300.9
Anderson	..	..	..	..	..	..	11	34.0	8	48.9	7	36.8	2	5.0	6	19.2	34	143.9
Bamberg	1	0.2	..	..	1	0.5	5	11.0	18	90.5	10	117.5	2	8.2	4	8.5	41	236.4
Barnwell	..	..	1	1.9	..	..	13	65.5	13	123.0	8	40.8	2	5.6	2	1.0	39	237.8
Beaufort	..	..	1	..	2	18.0	10	38.2	5	47.2	22	85.0	..	..	3	5.5	42	193.9
Berkeley	..	..	1	5.0	2	53.0	20	232.7	8	73.1	150	1,763.9	..	..	2	22.0	133	2,149.7
Calhoun	..	..	..	..	..	..	8	18.2	1	27.9	3	16.0	..	..	..	..	12	62.1
Charleston	..	..	1	5.0	1	0.1	34	239.9	11	57.9	42	232.6	2	5.5	4	6.8	95	547.8
Cherokee	..	..	1	..	..	..	3	9.5	3	20.0	6	7.6	..	..	..	..	14	39.5
Chester	..	..	4	12.4	..	..	8	48.3	6	34.2	..	..	..	..	1	15.0	19	109.9
Chesterfield	..	..	1	11.0	5	81.5	3	4.4	11	71.2	32	132.2	2	3.0	4	13.5	58	316.8
Clarendon	..	..	..	..	17	183.6	35	211.6	22	122.4	99	946.0	2	72.0	14	37.0	189	1,572.6
Colleton	..	..	1	3.0	6	74.8	26	252.5	29	327.9	55	475.1	..	..	10	46.3	121	1,104.8
Darlington	1	7.6	4	38.0	6	..	34	256.3	7	8.2	4	1.7	2	10.0	3	3.1	61	399.7
Dillon	1	33.0	..	..	..	..	9	30.4	8	28.5	3	0.8	..	..	..	..	21	92.7
Dorchester	..	..	1	1.0	2	12.0	23	199.5	15	221.5	16	237.5	..	..	1	48.0	58	719.5
Edgefield	1	21.0	1	6.0	..	..	3	54.3	2	2.5	..	..	1	1.5	2	2.9	10	88.2
Fairfield	1	0.4	4	21.6	..	..	5	21.0	1	6.0	2	32.0	..	..	..	..	13	81.0
Florence	..	..	..	..	2	63.7	13	110.1	44	321.8	31	381.5	4	25.3	2	1.3	96	993.7
Georgetown	..	..	..	..	1	0.1	21	119.4	6	158.0	26	195.3	4	21.1	4	9.7	62	503.6
Greenville	..	..	1	1.0	3	9.2	48	139.9	30	74.4	17	68.9	2	3.8	13	9.3	114	314.4
Greenwood	3	6.0	2	1.8	..	..	9	41.3	3	7.4	..	..	1	0.5	5	36.3	23	93.3
Hampton	..	..	1	26.0	..	..	13	59.1	4	24.0	27	152.6	1	2.0	1	2.0	47	265.7
Horry	1	0.1	..	..	2	3.4	24	173.4	28	159.5	46	689.2	3	2.6	19	89.7	123	1,117.9
Jasper	..	..	..	..	1	8.2	12	159.0	9	29.5	63	957.1	..	..	3	5.8	88	1,159.6
Kershaw	2	6.2	2	4.0	1	4.0	13	84.9	7	62.0	9	59.6	1	5.0	7	14.4	42	240.1
Lancaster	..	..	..	..	1	1.5	11	27.6	4	8.4	..	..	..	..	4	5.3	20	42.8
Laurens	1	9.0	4	13.7	2	4.6	10	49.5	3	7.6	..	..	1	2.7	9	21.9	30	109.0
Lee	..	..	..	..	1	3.4	10	74.0	13	74.8	5	168.7	1	5.0	..	..	30	325.9
Lexington	..	..	..	..	1	15.2	16	58.3	15	25.7	1	0.5	1	0.1	6	36.6	54	154.3
Marion	5	10.4	1	7.5	5	2.1	13	60.5	13	145.7	..	..	..	..	1	1.0	30	210.3
Marlboro	..	..	2	2.1	3	65.0	8	37.9	7	55.6	23	173.3	1	5.0	1	6.6	45	345.5
McCormick	..	..	13	18.5	..	..	1	0.2	..	..	2	1.0	..	..	..	..	16	19.7
Newberry	..	..	..	..	1	2.5	4	22.4	5	2.8	..	..	1	0.8	2	2.6	13	31.1
Oconee	..	..	5	2.6	..	..	6	10.6	14	57.1	3	4.4	1	0.3	16	25.4	45	100.4
Orangeburg	..	..	..	..	..	..	51	509.0	15	154.1	80	1,278.8	2	11.4	5	77.2	153	2,030.5
Pickens	..	..	..	..	..	..	5	11.5	14	40.6	6	9.0	..	..	8	35.1	33	96.2
Richland	1	28.0	4	140.6	4	85.6	40	275.2	13	56.9	19	95.9	1	0.3	13	36.1	95	718.6
Saluda	..	..	..	..	..	..	6	2.6	..	..	..	..	..	..	..	..	6	2.6
Spartanburg	1	2.0	2	3.0	..	..	6	20.6	11	66.6	2	1.4	2	8.0	8	48.3	32	149.9
Sumter	..	..	..	..	1	1.6	34	129.5	7	34.2	18	153.5	3	86.6	11	92.9	74	498.3
Union	1	2.0	1	17.0	..	..	2	3.5	..	..	3	6.5	1	0.5	2	10.0	10	39.5
Williamsburg	1	10.0	..	..	11	148.0	13	109.8	39	647.2	41	739.4	2	5.5	2	0.6	109	1,660.5
York	..	..	..	..	..	..	16	71.5	10	14.3	2	2.6	2	1.1	8	21.5	38	111.0
Totals	28	156.3	69	372.0	81	872.5	699	4,402.5	521	3,840.6	898	9,335.5	54	334.3	240	939.3	2,590	20,253.0

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1957-58

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL NO.
Abbeville .....	....	9	1	....	....	10
Aiken	11	83	12	....	....	106
Allendale .....	....	26	10	....	....	36
Anderson .....	....	31	3	....	....	34
Bamberg	2	33	6	....	....	41
Barnwell	3	30	6	....	....	39
Beaufort .....	....	39	3	....	....	42
Berkeley	5	126	52	....	....	183
Calhoun	1	10	1	....	....	12
Charleston	8	72	15	....	....	95
Cherokee	1	12	1	....	....	14
Chester	1	13	5	....	....	19
Chesterfield	17	32	9	....	....	58
Clarendon	33	126	28	2	....	189
Colleton	14	78	29	....	....	121
Darlington	11	37	13	....	....	61
Dillon	9	9	3	....	....	21
Dorchester	2	42	13	1	....	58
Edgefield .....	....	8	2	....	....	10
Fairfield .....	....	11	2	....	....	13
Florence	3	72	21	....	....	96
Georgetown	11	43	6	2	....	62
Greenville	35	71	8	....	....	114
Greenwood	1	19	3	....	....	23
Hampton	2	39	6	....	....	47
Horry	20	77	24	2	....	123
Jasper	9	55	23	1	....	88
Kershaw	2	35	5	....	....	42
Lancaster	3	16	1	....	....	20
Laurens	1	28	1	....	....	30
Lee .....	....	24	5	1	....	30
Lexington	14	38	2	....	....	54
Marion	3	24	3	....	....	30
Marlboro	1	36	8	....	....	45
McCormick	4	12	....	....	....	16
Newberry	1	11	1	....	....	13
Oconee	9	35	1	....	....	45
Orangeburg	4	110	36	3	....	153
Pickens	7	24	2	....	....	33
Richland	7	76	11	1	....	95
Saluda	3	3	....	....	....	6
Spartanburg	1	28	3	....	....	32
Sumter	4	61	9	....	....	74
Union .....	....	9	1	....	....	10
Williamsburg	18	53	34	4	....	109
York	5	31	2	....	....	38
Totals	286	1857	430	17	....	2590

UNIT	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Abbeville	2	12.5	4	50.9	..	16.4	12	59.7	..	75.8	2	11.9	..	42.6	..	53.9	2	5.1	..	5	24.6	
Aiken	8	15.3	18	83.5	..	4.0	3	6.3	7	82.0	18	136.0	..	21.0	2	17.0	3	9.5	..	5	55.0	
Allendale	1	10.0	3	26.0	..	12.0	1	2.0	1	1.5	3	4.0	..	2.5	4	27.3	..	..	..	3	5.0
Anderson	9	13.4	10	72.0	..	11.5	3	7.0	1	1.0	20	129.5	..	27.7	1	5.0	..	..	..	1	2.0
Bamberg	1	12.0	..	..	..	10.2	5	61.7	6	45.2	12	57.5	..	34.2	1	2.4	..	..	..	1	16.0
Barnwell	..	..	2	10.4	..	..	9	29.2	22	27.3	17	73.3	..	16.1	5	46.0	..	2.0	..	..	..
Beaufort	..	..	..	..	..	..	16	149.2	..	257.0	53	836.0	..	448.1	25	340.9	10	55.1	..	..	..
Berkeley	1	1.6	..	2.0	..	..	1	27.9	1	1.5	3	13.6	..	16.4	..	74.0	..	..	..	1	8.5
Calhoun	1	..	..	15.2	..	3.0	10	51.4	19	51.5	32	272.0	..	71.6	..	13.0	..	..	..	..	..
Charleston	..	..	2	7.0	..	..	..	..	7	9.1	2	6.4	..	2.0	2	15.0	..	..	..	..	..
Cherokee	3	3.6	2	10.0	..	..	..	..	2	6.0	3	48.5	..	17.0	2	7.0	1	4.0	..	2	1.8
Chester	3	30.5	1	1.0	..	2.0	2	5.0	3	30.7	24	157.9	..	14.1	12	67.6	2	3.1	..	4	1.9	
Chesterfield	3	1.0	..	0.3	..	15.2	42	274.1	27	132.5	50	765.5	..	257.9	13	85.0	3	7.1	..	..	..
Clarendon	..	..	1	4.0	..	45.0	12	55.2	12	76.4	39	432.3	..	289.1	17	167.2	3	16.5	..	1	10.0
Colleton	..	0.4	1	2.7	..	22.2	8	16.0	8	81.9	14	70.0	..	136.7	6	56.7	2	2.1	..	3	8.4	
Darlington	..	0.9	2	33.1	..	1.2	..	..	3	1.4	6	5.8	..	23.0	2	24.2	2	3.0	..	..	..
Dillon	1	..	..	4.0	..	26.0	7	52.0	4	14.5	18	300.5	..	249.5	2	38.0	2	24.0	..	..	4.0
Dorchester	..	..	2	27.0	..	2.0	..	..	1	3.6	2	3.4	..	49.5	..	..	..	..	..	2	2.7
Edgefield	..	..	3	19.0	..	..	..	..	..	..	1	2.0	..	4.0	1	2.0	1	6.0	..	2	32.0
Fairfield	..	..	2	11.1	..	13.1	13	174.7	..	2.5	30	295.0	..	219.2	12	165.2	4	7.7	..	2	0.8
Florence	1	11.2	3	..	..	7.9	5	20.4	4	5.1	14	171.7	..	222.8	10	58.2	4	9.6	..	2	0.2
Georgetown	..	..	1	2.0	..	11.5	4	32.2	21	79.7	18	22.1	..	22.0	19	88.2	1	0.1	..	4	7.4
Greenville	11	18.0	18	33.0	..	..	..	..	..	..	6	8.5	..	1.2	2	5.2	1	0.5	..	3	33.0
Greenwood	4	19.5	2	19.4	..	..	2	..	1	0.4	6	..	..	..	..	..	..	..	..	..	..
Hampton	..	..	..	..	..	5.0	..	2.1	7	10.9	19	156.5	..	88.7	2	2.5	..	..	..	..	..
Horry	7	13.8	4	4.1	..	65.6	11	102.4	6	31.0	36	322.8	..	156.0	18	388.9	6	13.8	..	3	16.5	
Jasper	..	..	..	..	..	0.5	1	1.2	10	83.7	53	593.0	..	29.0	5	33.2	1	70.0	..	..	..
Kershaw	4	33.2	2	3.5	..	13.0	1	1.0	7	46.0	6	60.9	..	0.8	6	44.0	2	4.0	..	1	0.1	
Lancaster	2	1.1	2	2.2	..	3.5	2	3.3	..	..	3	7.5	..	11.3	2	5.9	1	0.5	..	1	13.0
Laurens	1	0.8	4	7.3	..	25.0	1	1.0	1	5.0	6	15.6	..	3	3	12.8	1	0.7	..	7	19.0	
Lee	1	11.0	2	2.6	..	..	7	172.3	2	7.9	14	123.4	..	2.0	2	4.0	1	2.7	..	..	..
Lexington	10	17.1	3	1.2	..	30.9	3	3.0	2	9.0	11	45.3	..	15.5	11	22.8	2	3.2	..	2	6.2	
Marion	1	0.4	1	7.2	..	10.0	2	6.4	1	6.0	13	122.4	..	28.7	3	26.8	1	1.0	..	1	0.4	
Marlboro	2	8.1	1	0.1	..	11.1	2	10.5	1	6.0	14	133.1	..	90.9	6	78.8	1	4.8	..	..	..
McCormick	1	0.4	1	0.4	..	0.5	2	0.6	1	3.2	..	12.9	..	1.5	1	0.2	2	3.4	..	..	9.5
Newberry	5	6.9	2	3.7	..	..	..	..	..	..	3	12.9	..	2.2	2	5.4	..	..	..	..	..
Oconee	8	6.6	7	3.7	..	0.8	1	1.2	..	..	6	35.6	..	18.3	5	6.9	1	0.4	..	..	..
Orangeburg	3	..	3	5.0	..	268.3	9	85.2	21	162.1	44	652.8	..	619.8	18	187.6	3	18.0	..	4	11.5	
Pickens	2	3.6	3	13.3	..	0.5	5	3.9	4	14.6	6	39.9	..	2.6	7	15.3	..	..	..	..	..
Richland	10	71.7	5	12.8	..	6.9	6	34.5	11	26.9	29	347.0	..	129.3	12	57.5	1	7.0	..	5	16.1	
Saluda	1	0.9	3	0.6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1.1
Spartanburg	2	4.0	6	6.6	..	..	2	2.5	..	1.7	4	19.5	..	35.0	3	5.6	1	6.0	..	5	69.0
Sumter	1	3.0	1	0.5	..	18.5	10	31.8	10	40.6	27	217.5	..	159.1	7	21.0	..	..	..	1	0.6
Union	..	..	1	1.0	..	..	1	4.0	..	3.0	4	20.0	..	..	1	9.0	..	..	..	1	0.5
Williamsburg	..	..	..	..	..	27.6	15	117.9	7	41.0	24	495.9	..	443.9	16	238.2	10	210.0	..	1	10.0
York	7	10.8	6	6.8	..	12.2	2	0.7	5	8.9	6	16.4	..	8.0	4	34.1	..	..	..	..	..
Totals	112	349.7	139	526.6	45	762.7	240	1,614.5	273	1,511.3	725	7,329.0	437	4,408.8	291	2,546.5	76	500.9	77	386.8		

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1957-58

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	28	1.1	156.3	5.6
Railroads	69	2.6	372.0	5.4
Campers	81	3.1	872.5	10.8
Smokers	699	27.0	4,402.5	6.3
Debris Burning	521	20.1	3,840.6	7.4
Incendiary	898	34.7	9,335.5	10.4
Lumbering	54	2.1	334.3	6.2
Miscellaneous	240	9.3	939.3	3.9
Totals	2,590	100.0	20,253.0	7.8

TABLE 7—CAUSES OF FIRES—FIVE YEAR PERIOD
(Percent of Total)

CAUSES	1953-54	1954-55	1955-56	1956-57	1957-58	Average For 5-Year Period
Lightning	0.6	2.4	1.1	1.7	1.1	1.4
Railroads	1.7	2.7	1.6	2.3	2.6	2.2
Campers	2.4	2.6	2.6	2.7	3.1	2.7
Smokers	25.6	26.1	23.8	26.0	27.0	25.7
Debris Burning	20.9	19.3	22.1	21.9	20.1	20.9
Incendiary	41.0	37.0	39.4	35.3	34.7	37.5
Lumbering	2.5	3.4	2.5	2.4	2.1	2.6
Miscellaneous	5.3	6.5	6.9	7.7	9.3	7.1

TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1957-58

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville	167,826	10	80.4	.05	8.0
Aiken	450,200	106	531.0	.12	5.0
Allendale	131,400	36	300.9	.23	8.4
Anderson	173,700	34	143.9	.08	4.2
Bamberg	126,000	41	236.4	.19	5.8
Barnwell	147,800	39	237.8	.16	6.1
Beaufort	188,400	42	193.9	.10	4.6
Berkeley	398,974	183	2,149.7	.54	11.7
Calhoun	123,500	12	62.1	.05	5.2
Charleston	271,994	95	547.8	.20	5.8
Cherokee	127,800	14	39.5	.03	2.8
Chester	260,023	19	109.9	.04	5.8
Chesterfield	310,000	58	316.8	.10	5.5
Clarendon	228,500	189	1,572.6	.69	8.3
Colleton	465,000	121	1,104.8	.24	9.1
Darlington	208,500	61	399.7	.19	6.6
Dillon	144,100	21	92.7	.06	4.4
Dorchester	268,200	58	719.5	.27	12.4
Edgefield	172,641	10	88.2	.05	8.8
Fairfield	338,957	13	81.0	.02	6.2
Florence	293,900	96	903.7	.31	9.4
Georgetown	415,600	62	503.6	.12	8.1
Greenville	267,800	114	314.4	.12	2.8
Greenwood	198,913	23	93.3	.05	4.1
Hampton	239,500	47	265.7	.11	5.7
Horry	557,600	123	1,117.9	.20	9.1
Jasper	280,000	88	1,159.6	.41	13.2
Kershaw	336,500	42	240.1	.07	5.7
Lancaster	199,400	20	42.8	.02	2.1
Laurens	244,735	30	109.0	.04	3.6
Lee	110,600	30	325.9	.29	10.9
Lexington	291,500	54	154.3	.05	2.9
Marion	224,700	30	210.3	.09	7.0
Marlboro	150,600	45	345.5	.23	7.7
McCormick	144,840	16	19.7	.01	1.2
Newberry	205,000	13	31.1	.02	2.4
Oconee	259,252	45	100.4	.04	2.2
Orangeburg	218,800	153	2,030.5	.64	13.3
Pickens	190,100	33	96.2	.05	2.9
Richland	289,500	95	718.6	.25	7.6
Saluda	149,956	6	2.6	.n	0.4
Spartanburg	208,300	32	149.9	.07	4.7
Sumter	205,400	74	498.3	.24	6.7
Union	157,894	10	39.5	.03	4.0
Williamsburg	429,800	109	1,660.5	.39	15.2
York	226,300	38	111.0	.05	2.9
Totals	11,300,008	2,590	20,253.0	.18	7.8

TABLE 9—FIVE YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
1953-54	11,300,008	6,532	119,142.2	1.05	18.2
1954-55	11,300,008	7,022	158,785.5	1.41	22.6
1955-56	11,300,008	4,506	76,743.5	0.68	17.0
1956-57	11,300,008	3,883	46,777.8	0.41	12.0
1957-58	11,300,008	2,590	20,253.0	0.18	7.8
Five Year Average	11,300,008	4,907	84,340.4	0.75	17.2

TABLE 10—S. C. STATE COMMISSION OF FORESTRY 1957-58 SEEDLING DISTRIBUTION BY LAND CLASSIFICATION

Land Ownership	Trees Planted
Farmers	43,037,800
Other Individuals	11,348,700
Associations and Clubs	135,000
Schools	110,000
State Forests	892,500
Other State Lands	469,100
Other Public Lands	148,000
Forest Industries	8,732,000
Other Industries	1,154,000
Federal Lands	419,100
TOTAL	66,446,200

The above figures include 5,600,000 pine seedlings which were purchased from North Carolina. In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

West Virginia Pulp & Paper Company.....	13,325,000
Atomic Energy Commission.....	10,277,384
Gair Woodlands Corporation.....	3,202,500
Union Bag—Camp Paper Corporation	120,000
Totals	26,922,884
Grand Totals, trees planted in S. C. 1957-58.....	93,369,084

TABLE 11—S. C. STATE COMMISSION OF FORESTRY 1957-58 SEEDLING DISTRIBUTION
BY COUNTY AND SPECIES

County	Loblolly	Slash	Longleaf	Arizona Cypress	Species Misc.	Total
Abbeville	1,351,100	21,000	1,000	1,000	.....	1,374,100
Aiken	268,000	3,176,900	50,000	20,200	.....	3,515,100
Allendale	158,000	2,632,500	13,000	8,500	.....	2,812,000
Anderson	1,989,000	202,000	9,000	4,500	500 YP	2,215,000
Bamberg	498,000	2,037,000	19,500	500	10,000 Shl.	2,555,000
Barnwell	141,000	2,599,000	14,000	8,000	.....	2,762,000
Beaufort	132,000	185,000	2,200	3,900	.....	323,100
Berkeley	480,100	463,000	10,000	.....	.....	953,100
Calhoun	228,000	1,300,000	8,000	2,000	.....	1,538,000
Charleston	17,600	179,600	2,000	.....	.....	199,200
Cherokee	403,500	5,000	1,000	2,100	.....	411,600
Chester	1,659,400	130,500	1,000	3,000	.....	1,793,900
Chesterfield	869,000	2,382,100	121,500	2,000	.....	3,374,600
Clarendon	456,000	1,169,000	13,000	1,500	.....	1,639,500
Colleton	573,000	1,958,000	6,500	5,500	.....	2,543,000
Darlington	187,000	811,500	19,000	7,000	.....	1,024,500
Dillon	215,900	243,800	9,000	5,000	.....	473,700
Dorchester	490,500	257,000	9,000	1,500	.....	758,000
Edgefield	819,200	368,500	500	.....	.....	1,188,200
Fairfield	991,000	44,000	.....	.....	.....	1,035,000
Florence	381,300	222,000	16,000	.....	.....	619,300
Georgetown	325,800	496,600	3,000	2,000	.....	827,400
Greenville	873,500	12,000	1,000	4,750	.....	891,250
Greenwood	1,055,500	129,000	4,000	.....	.....	1,188,500
Hampton	285,000	1,979,000	2,000	2,000	250 YP	2,268,250
Horry	332,900	841,600	4,000	5,200	.....	1,183,700
Jasper	80,000	1,130,000	4,000	4,000	.....	1,218,000
Kershaw	1,227,000	2,323,000	37,000	3,000	.....	3,590,000
Lancaster	1,438,700	190,000	1,000	.....	.....	1,629,700
Laurens	1,136,000	258,000	2,000	.....	.....	1,396,000
Lee	165,000	310,000	3,000	1,000	.....	479,000
Lexington	340,250	929,500	11,750	18,000	.....	1,299,500
McCormick	339,700	18,000	2,000	.....	.....	359,700
Marion	273,400	329,000	3,250	8,500	.....	614,150
Marlboro	444,000	847,500	8,000	3,000	.....	1,302,500
Newberry	1,132,000	413,000	1,000	.....	.....	1,546,000
Oconee	1,383,800	9,000	.....	2,000	5,000 Shl.	1,399,800
Orangeburg	232,000	2,966,000	56,250	12,500	300 RC	3,267,050
Pickens	1,312,000	8,000	.....	2,500	1,000 Shl.	1,323,500
Richland	452,500	1,361,500	31,000	9,600	.....	1,854,600
Saluda	190,000	65,500	12,500	.....	.....	268,000
Spartanburg	716,500	9,000	5,200	2,000	.....	732,700
Sumter	338,500	1,094,500	35,000	3,000	.....	1,471,000
Union	482,100	89,000	.....	.....	100 Shl.	571,200
Williamsburg	455,000	411,500	22,500	1,000	.....	890,000
York	1,754,400	7,300	3,100	2,000	.....	1,766,800
Totals	29,074,150	36,614,900	577,750	162,250	16,100 Shl.	66,446,200

750 YP
300 RC

The above figures include 5,600,000 pine seedlings which were purchased from North Carolina.
In addition, the organizations listed below brought into the state or produced for planting the following number of trees:

West Virginia Pulp & Paper Company.....	13,325,000
Atomic Energy Commission.....	10,277,384
Gair Woodlands Corporation	3,202,500
Union Bag—Camp Paper Corporation	120,000

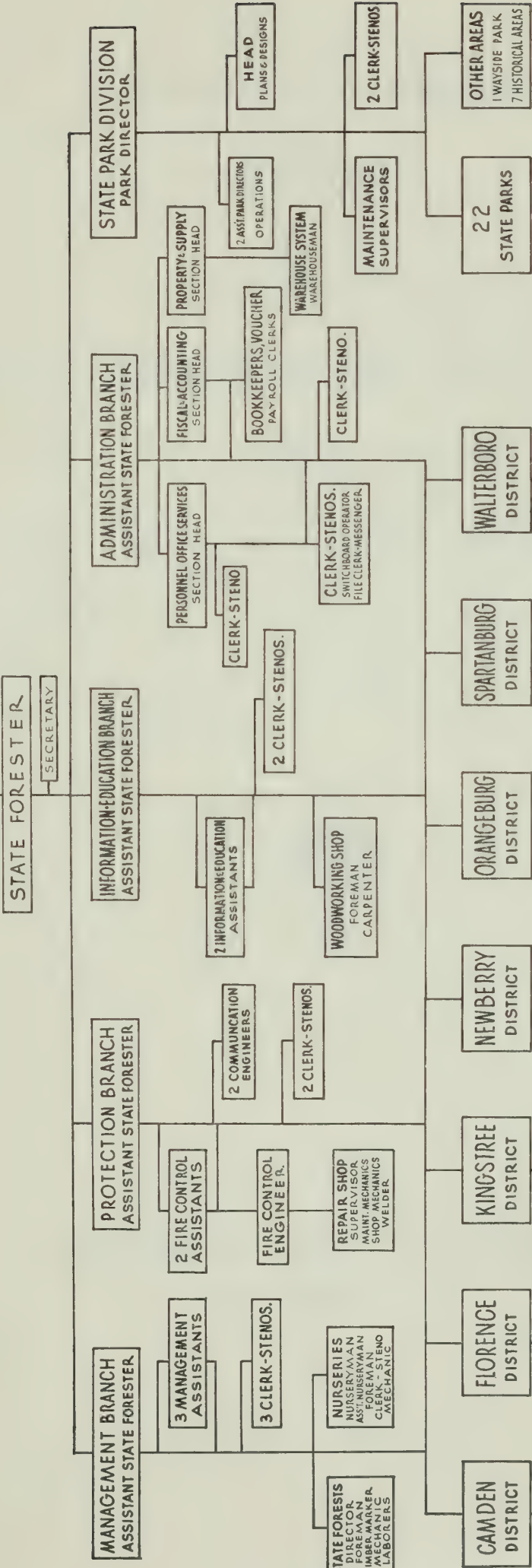
Totals 26,922,884

Grand Totals, trees planted in S. C. 1957-58..... 93,369,084

TABLE 12.—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

County	Seedlings Planted 1929-1957	Seedlings Planted 1957-1958	Grand Total Planted To Date	Acres Planted Through June 30, 1958	Acres Needing Planting as of June 30, 1958
Abbeville	8,694,688	1,841,100	10,535,788	10,536	2,649
Aiken	70,087,193	11,822,007	81,909,200	81,909	82,700
Allendale	13,917,895	3,852,000	17,769,895	17,770	11,280
Anderson	10,394,447	2,215,000	12,609,447	12,609	11,405
Bamberg	3,055,950	2,932,000	5,987,950	5,988	15,784
Barnwell	13,123,425	5,266,477	18,389,902	18,389	17,461
Beaufort	3,189,745	338,100	3,527,845	3,528	42,780
Berkeley	16,270,535	1,906,100	18,176,635	18,177	38,708
Calhoun	3,617,350	1,542,000	5,159,350	5,159	1,325
Charleston	3,291,240	199,200	3,490,440	3,490	50,574
Cherokee	4,804,029	547,600	5,351,629	5,352	14,322
Chester	10,048,900	1,813,900	11,862,800	11,863	27,517
Chesterfield	15,856,250	3,608,600	19,464,850	19,465	123,009
Clarendon	7,127,415	1,639,500	8,766,915	8,767	19,121
Colleton	12,324,380	2,891,500	15,215,880	15,216	14,716
Darlington	4,119,820	1,024,500	5,144,320	5,145	10,066
Dillon	2,606,755	473,700	3,080,455	3,081	12,502
Dorchester	10,527,180	3,109,000	13,636,180	13,636	19,393
Edgefield	5,429,838	1,188,200	6,618,038	6,618	4,673
Fairfield	8,309,679	1,065,000	9,374,679	9,375	14,580
Florence	2,759,968	619,300	3,379,268	3,379	24,590
Georgetown	8,614,300	1,652,400	10,266,700	10,266	26,920
Greenville	4,576,879	1,088,250	5,665,129	5,665	22,990
Greenwood	9,440,122	1,378,550	10,818,622	10,819	10,537
Hampton	13,166,415	2,655,950	15,822,365	15,822	7,736
Horry	8,587,200	1,183,700	9,770,900	9,771	45,394
Jasper	14,248,210	2,642,800	16,891,010	16,891	15,867
Kershaw	31,022,737	4,742,000	35,764,737	35,765	83,142
Lancaster	9,724,893	21,663,700	11,393,593	11,394	31,781
Laurens	11,032,990	1,909,500	12,942,490	12,943	13,156
Lee	2,278,555	479,000	2,757,555	2,758	28,969
Lexington	7,671,790	1,307,500	8,979,290	8,980	78,906
McCormick	3,079,125	359,700	3,438,825	3,439	13,736
Marion	2,979,795	614,150	3,593,945	3,594	17,667
Marlboro	7,347,030	1,302,500	8,649,530	8,650	19,255
Newberry	10,127,523	1,546,000	11,673,523	11,674	5,430
Oconee	4,987,035	1,399,800	6,386,835	6,387	10,928
Orangeburg	9,751,100	3,350,050	13,101,150	13,101	8,544
Pickens	6,108,855	1,323,500	7,432,355	7,433	3,074
Richland	11,164,428	2,459,600	13,624,028	13,624	85,677
Saluda	2,930,121	268,000	3,198,121	3,198	11,941
Spartanburg	9,579,299	1,141,700	10,720,999	10,721	26,508
Sumter	19,853,465	1,483,000	21,336,465	21,336	8,367
Union	10,091,699	1,043,700	11,135,399	11,136	21,975
Williamsburg	4,593,065	1,006,000	5,599,065	5,599	34,730
York	9,783,206	2,265,300	12,048,506	12,048	29,189
Industry Dist. ....	.....	.....	.....	.....	.....
(Co. Dist. Unknown) .....	.....	3,208,000	.....	.....	.....
GRAND TOTAL	462,301,519	93,369,084	552,462,603	552,466	1,221,574

SOUTH CAROLINA STATE COMMISSION OF FORESTRY



STATE PARK ORGANIZATION

**REGULAR
SUPERINTENDENT
RANGER
FOREMAN
LABORERS
SEASONAL
LIFE GUARDS
BATH HOUSE OPERATORS
CONCESSIONAIRE**

COUNTY UNIT ORGANIZATION

COUNTY FORESTRY BOARD MEMBERS (5)

RANGER

DISPATCHER & TOWERMEN

WARDENS

MEDIUM SUPPRESSION UNIT OPERATORS

FLEXIBLE CREWS

VOLUNTEER CREWS

DISTRICT OFFICE ORGANIZATION

**DISTRICT FORESTER
FORESTERS
DISTRICT RANGER
FORESTRY AIDES
RADIO TECHNICIAN
HEAVY SUPPRESSION UNIT OPERATOR-MECHANIC
CLERK - STENOGRAPHER**

STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1958 TO JUNE 30, 1959



CHARLES H. FLORY, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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To Honorable Ernest F. Hollings, Governor, and to the General Assembly of South Carolina:

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1958 to June 30, 1959.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,
Fulton B. Creech, *Chairman*.

PERSONNEL

S. C. STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1959)

Members of the Commission

Fulton B. Creech, Chairman, Sumter

E. Craig Wall, Conway

Dr. Robert C. Edwards, President, Clemson College, Clemson

A. B. Taylor, Sr., Spartanburg

John C. Pracht, Greenwood

Secretary of the Commission

Chas. H. Flory, State Forester

DIVISION OF STATE PARKS

C. West Jacocks, State Park Director

T. D. Ravenel, Assistant State Park Director—Operations

E. R. Vreeland, Assistant State Park Director—Operations

State Park Superintendents

Aiken State Park, L. Storm Bailey, Windsor

Andrew Jackson Historical State Park, Cecil S. Hayes, Route
1, Lancaster

Barnwell State Park, Mrs. D. I. Ross, Blackville

*Cheraw State Park, George T. Holder, Cheraw

Chester State Park, Clarence Doster, Chester

Croft State Park, J. E. Thornton, Spartanburg

Edisto Beach State Park, Keith M. Fleischman, Edisto Island

Givhans Ferry State Park, Wm. Wiggins, Jr., Ridgeville

*Greenwood State Park, Van W. Pressley, Ninety Six

*Hunting Island State Park, Norman B. Cooler, Frogmore

Kings Mountain State Park, Raymond M. Sisk, Kings Creek

Lee State Park, Joe Frank Watson, Bishopville

Little Pee Dee State Park, LaFon Norton, Dillon

Myrtle Beach State Park, T. F. Barbie, Jr., Myrtle Beach

Oconee State Park, James W. Ray, Walhalla

Paris Mountain State Park, Ed. H. Miller, Greenville

*Pleasant Ridge State Park, LeRoy Smith, Cleveland

*Poinsett State Park, F. Marion Dwight, Wedgefield

Rivers Bridge State Park, E. B. Mobley, Ehrhardt

Santee State Park, G. B. LaBoon, Santee

Sesqui-Centennial State Park, Marshall D. Holder, Columbia
 Table Rock State Park, Robert G. Jones, Pickens
 Colleton Wayside Park, Willard Risher, Canadys

* Includes area for Negroes.

State Park Advisory Committee

J. D. Carroll	Harry R. E. Hampton
Lexington	% The State Newspaper
V. F. Platt	Columbia
Conway	Thomas Moore Craig
Cecil D. McDaniel	Moore
Box 347	Bennet Moore
Beaufort	Cheraw
Wayne Freeman	Mrs. Bradley Morrah
Greenville News	212 Overbrook Rd.
Greenville	Greenville
Harold A. Petit	Mrs. Jack Bryant
S. C. Electric & Gas Co.	Orangeburg
P. O. Box 952	
Charleston	

DIVISION OF FORESTRY

Branch of Administration

E. B. Price, Assistant State Forester
 C. H. Nelson, Head, Fiscal and Accounting
 Delford F. Furney, Head, Property and Supply
 Virginia S. Holmes, Head, Personnel and Office Services
 Warehouse, Sumter
 J. P. Watson, Warehouseman

Branch of Information and Education

Walter T. Ahearn, Assistant State Forester
 Claude F. Barden, Information and Education Assistant
 Nelson L. Peach, Information and Education Assistant
 Sign and Woodworking Shop, Sumter
 Olin M. Ballentine, Foreman

Branch of Forest Management

E. C. Pickens, Assistant State Forester
 Howard R. Scott, Management Assistant
 E. L. Middleswart, Management Assistant
 Sand Hills State Forest, Patrick

Randolph B. Lee, Director
 Manchester State Forest, Wedgefield
 Robert N. McCombs, Director

Branch of Nurseries

A. A. Lehocky, Assistant State Forester
 Horace L. Tilghman Nursery, Wedgefield
 L. M. Staley, Nurseryman
 Piedmont Nursery, Pickens
 E. W. Cooler, Jr., Nurseryman
 Coastal Nursery, St. George
 R. F. Morgan, Nurseryman
 Ridge Nursery, Trenton
 David D. Brown, Nurseryman

Branch of Forest Fire Control

John R. Tiller, Assistant State Forester
 J. T. Hance, Fire Control Assistant
 John M. Shirer, Fire Control Assistant
 Hugh M. Westbury, Fire Control Assistant
 J. M. Geddings, Assistant, Fire Control Communications
 R. M. Littlejohn, Assistant, Fire Control Communications
 Equipment and Repair Shop, Sumter
 O. P. Woodward, Supervising Mechanic

District Offices

Chauncey R. Nichols, District Forester, Camden
 R. B. Rhett, Forester, Camden
 Daniel D. Riddick, Forester, Camden
 Wilson M. Alexander, Forester, Camden
 Edgar L. Dallery, Forester, Sumter
 W. O. Morgan, District Ranger, Camden
 (Camden District includes counties of: Chesterfield,
 Kershaw, Lancaster, Lee, Richland and Sumter)
 Alvin E. Kunz, District Forester, Florence
 Kenneth G. Clemens, Forester, Florence
 John R. Allison, Forester, Conway
 E. G. Lambrecht, Forester, Florence
 Jack F. Young, Forester, Bennettsville
 Malcolm B. Wright, Forestry Aide, Florence
 Fred W. Watson, Jr., District Ranger, Florence
 (Florence District includes counties of: Darlington, Dillon,
 Florence, Horry, Marion and Marlboro)

Fred W. Horn, District Forester, Kingstree

Robert J. Gould, Forester, Kingstree

Franklin K. Curry, Forester, Kingstree

James Richard Todd, Forestry Aide, Kingstree

John R. Grubbs, District Ranger, Kingstree

(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown and Williamsburg)

John E. Graham, District Forester, Newberry

Donald W. Horton, Forester, Greenwood

Phil A. Hadaway, Jr., Forester, Newberry

Wilbur H. Reames, Forester, Newberry

Clifton T. Carter, Timber Marker, Chester

Walter W. Senn, Forestry Aide, Newberry

Melton Wall, District Ranger, Newberry

(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

Marvin T. Gaffney, District Forester, Orangeburg

Robert C. Simmons, Forester, Orangeburg

C. C. Canada, Forester, Lexington

C. B. Harding, Jr., Forester, Orangeburg

Wray E. Freeman, Forester, Orangeburg

Chas. C. Rountree, Jr., Forester, Orangeburg

Adrian Lee Pardue, District Ranger, Aiken

(Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington, and Orangeburg)

W. M. Lindsey, District Forester, Spartanburg

Ralph W. Evans, Forester, Pickens

J. Harlan McLees, Forester, Spartanburg

Legare M. Duke, Forester, Spartanburg

John W. Little, Forester, Walhalla

C. W. Nuite, Forester, Pickens

Chas. E. Turpin, District Ranger, Spartanburg

(Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

Boris Hurlbutt, District Forester, Walterboro

Paul B. Carson, Forester, Walterboro

Arthur P. Jervy, Forester, Walterboro

H. G. Brown, Forester, Hampton

W. C. Polk, Forestry Aide, Walterboro

E. H. Benton, District Ranger, Walterboro

(Walterboro District includes counties of: Beaufort,
Charleston, Colleton, Dorchester, Hampton and Jasper)

Protection Units

Abbeville Unit Ranger, Charlie Shaw, Lowndesville

Aiken Unit Ranger, J. Ramie Yonce, Aiken

Allendale Unit Ranger, W. W. Brunson, Allendale

Anderson Unit Ranger, John E. Embler, Anderson

Bamberg Unit Ranger, P. H. Cave, Olar

Barnwell Unit Ranger, W. R. Moore, Barnwell

Beaufort Unit Ranger, W. Heyward Graves, Beaufort

Berkeley Unit Ranger, C. L. Wyndham, Moncks Corner

Calhoun Unit Ranger, Hampie F. Ott, St. Matthews

Charleston Unit Ranger, J. I. Garvin, Charleston

Cherokee Unit Ranger, B. T. White, Gaffney

Chester Unit Ranger, J. Gill Simpson, Chester

Chesterfield Unit Ranger, W. M. Smith, Chesterfield

Clarendon Unit Ranger, Elliott E. Rose, Manning

Colleton Unit Ranger, Glenn B. Britt, Walterboro

Darlington Unit Ranger, Alton Yarborough, Darlington

Dillon Unit Ranger, Ernest S. Oliver, Dillon

Dorchester Unit Ranger, Carlisle Haskell Durr, St. George

Edgefield Unit Ranger, S. G. Reel, Edgefield

Fairfield Unit Ranger, R. E. Patrick, Winnsboro

Florence Unit Ranger, Hugh Cusaac, Florence

Georgetown Unit Ranger, Laurin T. Sessions, Georgetown

Greenville Unit Ranger, G. G. Paris, Greenville

Greenwood Unit Ranger, James C. Smith, Jr., Greenwood

Hampton Unit Ranger, J. D. Peeples, Early Branch

Horry Unit Ranger, James T. Jones, Conway

Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland

Kershaw Unit Ranger, L. E. Smith, Camden

Lancaster Unit Ranger, A. A. Plyler, Lancaster

Laurens Unit Ranger, Thos. F. Hill, Laurens

Lee Unit Ranger, E. A. Hall, Bishopville

Lexington Unit Ranger, V. S. Bickley, Lexington

Marion Unit Ranger, Hoyt Collins, Marion

Marlboro Unit Ranger, Jesse Adams, Jr., Bennettsville

McCormick Unit Ranger, G. L. Sharpton, McCormick
 Newberry Unit Ranger, Marvin E. Wilson, Newberry
 Oconee Unit Ranger, D. O. Morgan, Walhalla
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg
 Pickens Unit Ranger, C. H. Gravely, Pickens
 Richland Unit Ranger, T. W. Cooper, Columbia
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda
 Spartanburg Unit Ranger, Milton E. McMillin, Spartanburg
 Sumter Unit Ranger, L. G. Cabbage, Sumter
 Union Unit Ranger, James G. Long, Union
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree
 York Unit Ranger, E. G. Foster, York

FORESTRY BOARD MEMBERS 1958-59

Abbeville—

John C. Gilliam, Calhoun Falls
 Reid Ashley, Rt. 2, Iva
 W. L. Bowman, Rt. 3, Box 232, Iva
 J. M. Kirkpatrick, RFD, Donalds
 Sam W. Sherard, Rt. 3, Abbeville

Aiken—

George Wilson, Bath
 Grady McElmurray, Rt. 4, N. Augusta
 J. C. Jones, Rt. 4, Aiken
 George Townes, Jr., Aiken
 K. C. Byars, Windsor

Allendale—

Joseph I. Chapman, Luray
 W. B. Manuel, Fairfax
 J. V. Spigener, Sr., Allendale
 Frank H. Aldrich, Allendale
 J. J. Snelling, Millett

Anderson—

I. Fleet McClain, Anderson
 W. J. Prater, Rt. 1, Townville
 J. C. McMillan, Rt. 4, Honea Path
 J. P. Bond, Rt. 3, Iva
 J. W. Merritt, Jr., Box 307, Rt. 4, Easley

Bamberg—

Harold Kearse, Olar
 Jack C. Kirkland, Bamberg
 Herbert Rhoad, Rt. 1, Branchville
 John A. Turner, Denmark
 W. F. Martin, Bamberg

Barnwell—

Ansel Still, Hilda
 W. E. Anderson, Box 393, Williston
 S. G. Lowe, Blackville
 Dean Rountree, Marlboro St., Barnwell
 Charles G. Youngblood, Box 114, Barnwell

Beaufort—

R. G. Mitchell, Beaufort
 W. A. Campbell, Sheldon
 Charles Ulmer, Jr., Bluffton
 Ernie Bell, Bluffton
 Richard Wisner, Ladies Island, Beaufort

Berkeley—

Herbert Cross, Cross
 Herbert Caddell, Rt. 1, Bonneau
 D. L. Bradwell, Huger
 Algie H. Kennedy, Moncks Corner
 Charles Marion, Pineville

Calhoun—

Joe M. Rast, Elloree
 Raymond R. Hill, Gaston
 J. T. Pearlstine, St. Matthews
 W. G. Peterkin, Fort Motte
 J. Mack Zeagler, Lone Star

Charleston—

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 Hartwell A. Black, 205 Parkwood Dr., Charleston
 DeWitt King, Sr., 92 Broad St., Charleston
 W. J. Newton, Yonges Island
 John F. Sosnowski, Wadmalaw Island

Cherokee—

W. A. Gettys, Gaffney
 W. Joe MacArthur, Gaffney

W. T. Hollifield, Kings Creek
 C. F. Blackwell, Gaffney
 Grady G. Turner, Gaffney

Chester—

Clyde C. Cornwell, Rt. 3, Chester
 Boyd Westbrook, Edgemoor
 Jas. E. Anderson, Richburg
 Dr. James Land, Chester
 J. Harper Gwinn, Blackstock

Chesterfield—

W. Clyde Hendricks, Chesterfield
 Lonnie W. McLain, Box 11, Patrick
 Walker B. Miles, Rt. 1, Mt. Croghan
 Clyde K. Laney, Cheraw
 J. Monroe McManus, Pageland

Clarendon—

E. G. Stukes, Davis Station
 L. E. Brailsford, Summerton
 Douglas McFaddin, New Zion
 B. G. Alderman, Alcolu

Colleton—

S. A. Cooler, Walterboro
 H. M. Kinsey, Walterboro
 Henry Black, Box 347, Walterboro
 E. A. Boynton, Jr., Walterboro
 M. P. Howell, Ruffin

Darlington—

Ed Flowers, Rt. 3, Hartsville
 John H. Kissiah, Rt. 4, Hartsville
 Leon Watkins, Hartsville
 Roland Warr, Rt. 3, Darlington
 H. K. Segars, Hartsville

Dillon—

J. T. Squires, Latta
 H. N. Cousar, Latta
 James R. C. Calhoun, Dillon
 D. L. McInnis, Rt. 1, Little Rock
 Tracy D. Rogers, Rt. 1, Lake View

Dorchester—

J. D. Parler, St. George
 H. W. Smoak, Reevesville
 R. V. Ackerman, Ridgeville

Edgefield—

W. Frank West, Modoc
 R. C. Bledsoe, Rt. 3, Edgefield
 Sam Slade, Edgefield
 H. Frank Cooper, Rt. 3, Augusta, Georgia
 Wm. D. Herlong, Johnston

Fairfield—

John McFadden, Ridgeway
 Marion Frazier, Strother
 Henry Johnston, Winnsboro
 W. T. Glenn, Jenkinsville
 Reid Long, Strother

Florence—

D. L. Brown, 341 Greenway Dr., Florence
 F. H. Poston, Pamplico
 Jas. H. McElveen, Timmons ville
 J. W. McLendon, Florence
 W. D. Boling, Pamplico

Georgetown—

L. T. Easley, Georgetown
 J. T. Maynard, Georgetown
 Clarence L. Newton, Sr., Rt. 2, Box 57, Andrews
 Richard L. Allston, Pawleys Island
 H. H. Flickinger, Georgetown

Greenville—

J. H. Kellett, Rt. 3, Belton
 S. B. Huff, Piedmont
 G. Dewey Butler, Travelers Rest
 Ansel Alewine, Taylors
 M. L. Jarrard, Cleveland

Greenwood—

E. W. Milford, Greenwood
 John Bowen, Troy
 A. C. Byrd, c/o Abney Mills, Greenwood

J. McD. Kinard, Ninety Six
Eldred S. Tinsley, Hodges

Hampton—

Sidney Linto, Box 191, Estill
Vernon C. Sauls, Hampton
R. C. DeLoach, Furman
Howard P. Rhodes, Estill
Lloyd Rivers, Hampton

Horry—

Lee Outlaw, Rt. 1, Myrtle Beach
T. A. Smart, Rt. 2, Conway
Allard Strickland, Rt. 1, Loris
Darewood Strickland, Rt. 2, Tabor City, N. C.
Hicks Huggins, Rt. 4, Nichols

Jasper—

Wallace Goethe, Tillman
J. Ivey Wells, Coosawhatchie
George Roberts, Pineland
B. J. Perry, Ridgeland
J. Hoyt Langford, Ridgeland

Kershaw—

Bentley R. Stogsdill, Boykin
C. W. Wooten, Blaney
Richard W. Lloyd, 1707 Lyttleton St., Camden
John Bowers, Kershaw
A. B. McLaurin, Bethune

Lancaster—

Harold Richardson, Rt. 1, Lancaster
Carl W. Mullis, Lancaster
W. G. Hance, Heath Springs
Charlie V. Morris, RFD, Lancaster
Frank Blackwell, Rt. 2, Jefferson

Laurens—

Allen Marler, RFD, Fountain Inn
J. Y. Martin, Ware Shoals
J. T. Hollingsworth, Cross Hill
Tan M. Ray, Clinton
Elmore G. Bramlett, RFD, Laurens

Lee—

Timmons Thomas, Rt. 2, Lamar
 Robert D. Pate, Rt. 2, Cassatt
 S. E. McElveen, Sr., Lynchburg
 Clifton Atkinson, St. Charles
 B. B. Davis, Oswego

Lexington—

Harper Shull, West Columbia
 Berley V. Shealy, Leesville
 Preston G. Freshley, Rt. 2, Columbia
 L. O. Rast, Swansea
 J. D. Carroll, Lexington

Marion—

A. H. Turbeville, Mullins
 Marion J. Carter, Marion
 B. B. Baker, Centenary
 A. M. Flowers, Marion
 T. C. Atkinson, Rt. 1, Mullins

Marlboro—

Colin McLaurin, Bennettsville
 R. M. Pegues, Rt. 4, Bennettsville
 C. D. Napier, Blenheim
 J. Richard Bryant, Rt. 1, Clio
 Brooks Usher, Bennettsville

McCormick

J. T. Creswell, Rt. 3, McCormick
 W. L. White, Rt. 2, McCormick
 J. C. Winn, Plum Branch
 J. M. Hemminger, Willington
 G. J. Sanders, McCormick

Newberry—

Chas. C. Wallace, Rt. 3, Newberry
 H. M. Hentz, Box 181, Newberry
 A. W. Murray, Newberry
 T. J. Abrams, Whitmire
 J. Cecil Berly, Pomaria

Oconee—

R. A. Reeves, Seneca
 B. W. Alexander, Westminster

Oscar Wigington, Salem
 W. H. Pelfrey, Rt. 2, Seneca
 Henry Miller, Westminster

Orangeburg—

George H. Priester, Neeses
 J. Nat Miley, Branchville
 M. H. Whetsell, Orangeburg
 L. E. Miller, Holly Hill
 Martin Cope, Cope

Pickens—

W. M. Ponder, Dacusville
 L. P. Thomas, Rt. 5, Box 237, Easley
 J. H. Bolding, Rt. 2, Pickens
 Furman Chastain, c/o Poinsett Lbr. & Mfg. Co., Pickens
 T. A. Bowen, Pickens

Richland—

Lonnie B. Nelson, Rt. 3, Columbia
 J. Roger Wilson, Blythewood
 E. B. Wingard, 3042 Broad River Road, Columbia
 L. W. Conder, Box 693, Columbia
 J. M. Bates, Wateree

Saluda—

M. H. Kemp, Johnston
 C. M. Forrest, Johnston
 J. Claude Wheeler, Saluda
 R. L. Hipp, Saluda
 A. R. Able, Saluda

Spartanburg—

Tom Moore Craig, Montgomery Bldg., Spartanburg
 Paul Hendrix, Duncan
 W. J. Martin, P. O. Bldg., Spartanburg
 Claude Bishop, Inman

Sumter—

Hugh M. McLaurin, Jr., Wedgefield
 Curtis Edens, Dalzell
 Albert Moore, Rt. 1, Olanta
 H. Fox Tindal, Pinewood

Union—

James A. Berry, Union
 T. Stokes Adams, Union
 A. T. Inabinett, Buffalo
 C. Lynell Gregory, Rt. 1, Buffalo
 Seth Garner, Rt. 4, Union

Williamsburg—

P. D. Bishop, Kingstree
 T. E. Salters, Salters
 Jack McFaddin, Cades
 T. V. Ligon, Lanes

York—

John M. Foster, York
 Oliver C. Faris, Catawba
 Sewell Hartness, Sharon
 Oscar Hammond, Fort Mill
 R. S. Flanagan, Bowling Green

STATE PARKS

SUMMARY

The importance of the service rendered South Carolina by its system of 23 state parks is demonstrated by the fact that again in the fiscal year over three million visitors used the state parks for health, relaxation, and recreation.

The leveling off of annual attendance at the three-million mark may indicate that this total is the normal expectancy and may prevail until more parks are added or until facilities are expanded.

The need for adequate maintenance of facilities is evident in the light of the conservation of human resources. Mental health and stability of families are direct results of wholesome outdoor recreation in the naturalistic setting of South Carolina's State Parks. With increased leisure on the one hand, and the tension of our times on the other, state park values cannot be reckoned in dollars and cents, but they are nevertheless real and important values.

For the past several years—specifically since the fiscal year 1951-52—the South Carolina State Parks have been host to diately ahead, make us realize that the acquisition of additional as this record may appear, it is, in itself, not enough. The state parks are not offering the park patrons the full advantage of these natural areas.

A program of interpretation of the natural and historic features of the state park areas should be begun in order to gain a greater appreciation and enjoyment of the state parks.

The state park system is now in its 25th year. Begun back in the depression years and the days of the CCC, the policy was to provide basic facilities for wholesome outdoor recreation at minimum cost to the park user.

Twenty-three state parks are well distributed, and so located that wherever you are in South Carolina there is at least one state park within a hour's drive.

This number of parks has been considered adequate for the present-day needs of our people. However, studies of expanding population figures and recreational demands in the years immediately ahead, make us realize that the acquisition of additional areas for future development is of prime importance. Although it may be necessary to wait a few years for the development of

additional park areas, these tracts should become a part of the state park system now.

The need for additional land and water spaces is equalled by the need for an interpretative program to bring to the attention and enlightenment of park patrons the important features of the areas—the natural phenomena, the historical significance and the scenic attractiveness.

The following is quoted from a report of a National Park Service specialist who, at the request of the State Commission of Forestry, reviewed some of the interpretive potentials of our state park system:

“The State Parks of South Carolina preserve fine examples of the State’s varied natural features as well as mementos of its cultural and historical heritage. There is a very great potential for the welfare of the people of South Carolina not only in physical recreation but also in the aesthetic and intellectual values of these areas. The importance of the parks as an economic asset will depend on their effectiveness in attracting and holding vacationers from other States as they travel to and through South Carolina. The interest of residents and tourists alike will be served through an interpretive program that tells the significant story of each park in an accurate, interesting, and understandable way.

Through interpretation the South Carolina State Park System



Since 1951 South Carolina State Parks have been host to more than three million visitors each year.

may have an important role in education as well as physical recreation.

Objectives of the interpretive program are:

1. To increase the enjoyment of park visitors and help them develop intellectual and aesthetic interests that will give greater returns from their use of leisure time.
2. To acquaint the people of South Carolina with the natural resources and scenic values of their state and the reciprocal relationships of man with his environment that affected the social, economic, and historical development of the state.
3. To search out and present the unique features of each of the areas in the park system so that they will be attractive and interesting to visitors from distant points.
4. To develop in all park visitors attitudes of appreciation for conservation principles and in this way contribute to the wise use and protection of parks and other public land."

ATTENDANCE

It may be significant that people have continued to visit South Carolina's state parks at the rate of three million each year, even though there have been no new and added improvements to attract them.

Sesqui-Centennial and Myrtle Beach State Parks again attracted the greatest numbers, having visitations exceeding the



Picnicking continued to be the most popular activity in state parks as these areas attracted a million and a third visitors.

400-thousand total. Four other parks had attendance of more than 200-thousand: Cheraw, Hunting Island, Paris Mountain and Table Rock.

The largest attendance at areas restricted to Negro use was the colored area of Hunting Island.

A complete table of state park attendance and use is shown on a following page.

Picnicking is still the most popular activity. A million-and-a-third park visitors had their meals in picnic areas, and another half million went swimming. The greatest percentage of increased use was brought about by family groups camping in the ever-expanding tent and trailer camping areas.

Park visitors came in ¾-million automobiles and buses, of which 133,704 carried out-of-state licenses.

APPROPRIATIONS

The fiscal year appropriation for operations totaled \$347,820—a figure approximately the same as for the past few years. Appropriated funds are not keeping pace with increased facility use, thus creating a build-up in delayed maintenance. This is unwise. An appropriation of from two to three percent of the capital investment for repair and maintenance operation is a sound policy, or an annual overall appropriation of approximately \$385,000 for good management and operation.

FAMILY VACATION CABINS

Family vacation cabins have long been an accepted facility in the state parks. For more than a generation South Carolinians have sought reservations of these cabins for summer vacations or weekend outings in the Fall and Spring.

The 63 cabins in eight state parks—located from the mountains to the seacoast—accommodated nearly a thousand white families during the year. The cabins for Negro families have received only scattered use.

Below is a table of the distribution of the cabins, with the number of cabins and their rentals.

Park—County	Cabins	Weekly	Out-of-Season Week-End
Cheraw—Chesterfield	9	\$24—\$36	\$ 9—\$15
Givhans Ferry—Dorchester	5	\$24	\$ 9
Hunting Island—Beaufort	4	\$42	\$18
Myrtle Beach—Horry	5	\$42	\$18
Oconee—Oconee	20	\$20—\$36	\$ 8—\$15
Poinsett—Sumter	6	\$24—\$42	\$ 9—\$15
Santee—Orangeburg	2	\$28	\$12
Table Rock—Pickens	12	\$24—\$44	\$10—\$24
Facilities for Negro Families:			
Hunting Island—Beaufort	2	\$35	\$12.50
Pleasant Ridge—Greenville	2	\$35	\$12.50

All cabins have electric lights, electric stoves, and electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin user must bring blankets, bed linens and towels, and silverware, such as knives, forks and spoons.

During the period June 1st through Labor Day summer rates are in effect and cabins are rented for a period of one week only. After Labor Day and through the following May cabins are available at reduced rates, and for week-end use. Many cabins are winterized and comfortable throughout the year.

To give every family an equal opportunity to obtain a cabin for a summer vacation, cabin assignments are made in a public drawing. All South Carolina applications are considered first; then out-of-state requests are reviewed.

Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, Box 357, Columbia, S. C., and must be received in Columbia prior to March 1st.

GROUP CAMPS

Seven group camps—six for white and one for Negro campers—located at four state parks, Paris Mountain, Cheraw, Kings Mountain and Poinsett, continue to supply the facilities for several thousand children seeking out-of-doors adventure. With a



Seven group camps located in four state parks continued to be used to capacity during the summer months by school groups, Boy Scouts, Girl Scouts, YWCA and YMCA and other camping groups.

daily capacity of 550 campers and about 13 weeks in the summer season, some 38,000 camper days are counted at the seven areas. Church and school groups, Boy Scouts and Girl Scouts, YMCA's and YWCA's make up the greater portion of the use agencies.

There is a rental charge of 35¢ per day, per person, for the camps which provide facilities for 42 to 140 campers.

Equipment and facilities are similar in all camps. The camps are used throughout the vacation season without any vacancies. Out-of-season use is spotty, as facilities are not adapted to winter use.

TENT AND TRAILER CAMPING

With the up-surge in use by park visitors seeking space for tent or trailer camping, new areas are being added, and others enlarged. The increase in numbers of these outdoor enthusiasts is nationwide in its scope, and is affecting parks, both state and national. Each area consists of an individually assigned space along a roadway and includes electrical outlet, water connection, table and cooking grill. Toilets and showers are available to the campers.



Tent and trailer camping showed the greatest percentage attendance increase as tent and trailer camping areas continued to expand.

TABLE OF TENT AND TRAILER AREAS

Park Location	FACILITIES								
	No. of Units	Flush Toilets	Showers	Electric Connections	Water Connection	Outdoor Grill	Picnic Tables	Miles to Gas and Grocery	Other Facilities
AIKEN—18 miles E. Aiken	4	*	*	X	X	X	X	3	1 2 3 4
BARNWELL—3 miles S. Blackville	8	X	*	X	X	X	X	2	1 2 3 4
CHERAW—4 miles S. Cheraw	12	X	X	X	X	X	X	2	1 2 3 4
CHESTER—3 miles SW Chester	6	X		X	X	X	X	2	2 3 4
COLLETON Wayside—12 mi. N. Wal'boro	4	X		X	X	X	X	1	2
HUNTING ISLAND—16 miles E. Beaufort	36	X	*	X	X		X	4	1 2
KINGS MOUNTAIN—12 miles N. York ...	10	X	X	X	X	X	X	1	1 2 3 4
MYRTLE BEACH—3 miles S. Myrtle Beach	150	X	X	X	X		X	2	1 2
OCONEE—8 miles NW Walhalla	20	X	*	X	X	X	X	2	1 2 3 4
POINSETT—18 miles SW Sumter	9	X	X	X	X	X	X	9	1 2 3 4
SANTEE—5 miles W. Santee	4	X	*	X	X	X	X	4	1 2 3 4
TABLE ROCK—16 miles N. Pickens	26	*	*	X	X	X	X	4	1 2 3 4

SYMBOLS: *—Available at Bathhouse
 1—Swimming
 2—Fishing
 3—Boating
 4—Hiking and Trails

A "Unit" is a space designed to accommodate from two to six people.

Camping areas are open the year around.

Pets must be kept on leash. No advance reservations.

CHARGES: Camping charges at above parks \$1.00 per day except at Myrtle Beach and Hunting Island which is \$1.25 per day, per unit. Limited camping facilities are available at 10 other State Parks at a cost of \$0.50 per day.

STATE PARK ACQUISITION AND DEVELOPMENT

In 1934 the first area in South Carolina was donated for a state park. This was in Chesterfield County and embraced 700 acres near Cheraw. Funds for the acquisition came from public subscription. Other areas which were to become Aiken, Givhans Ferry, Kings Mountain, Myrtle Beach and Poinsett State Parks were also added this first year.

Two years later the first area was ready to receive the public and on July 1, 1936 the first official park user visited Myrtle Beach State Park.

Of the 23 state parks, 21 areas are for white use and five areas are developed for Negro families. This proportion is in line with the use demand.

The 23 state parks, with their acreage, location, date of establishment or acquisition, and date opened to visitors, are shown below:

Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken	1,067	Aiken	July 1934	Aug. 1936
Andrew Jackson Historical..	360	Lancaster	April 1953	Mar. 1957
Barnwell	307	Barnwell	July 1937	Aug. 1939
Cheraw	7,361	Chesterfield	March 1934	July 1939
Chester	523	Chester	May 1935	July 1939
Colleton Wayside	35	Colleton	May 1938	June 1940
Croft	7,135	Spartanburg	May 1949	June 1949
Edisto	1,255	Charleston Closed Feb. 1956 ...	Feb. 1935	June 1937
Givhans Ferry	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood	914	Greenwood	April 1938	July 1940
Hunting Island	5,000	Beaufort	July 1938	June 1941
Kings Mountain	6,041	York-Cherokee	Nov. 1934	June 1940
Lee	2,839	Lee	June 1935	June 1941
Little Pee Dee	835	Dillon	June 1951	June 1955
Myrtle Beach	312	Horry	Aug. 1934	July 1936
Oconee	1,165	Oconee	July 1935	June 1937
Paris Mountain	1,275	Greenville	April 1935	June 1937
Pleasant Ridge	300	Greenville	Sept. 1950	June 1955
Poinsett	1,000	Sumter	Aug. 1934	Aug. 1936
Rivers Bridge	390	Bamberg	May 1945	July 1945
Santee	2,364	Orangeburg	Jan. 1942	June 1949
Sesqui-Centennial	1,500	Richland	Aug. 1937	June 1940
Table Rock	2,860	Pickens	May 1935	June 1940
46,173				

HISTORICAL AREAS

The Division of State Parks is charged by the Legislature to maintain six historical areas within the State and receives a special appropriation for this purpose.

A special item of \$3,000 was added this year for a survey of the potential of the colonial town of Dorchester and the historic old fort on the Ashley River in Dorchester County near Summerville, and to make a report to the 1960 Legislature.

The Fort Watson memorial, an Indian mound in Clarendon County, the General Thomas Sumter burial area in Sumter County, and the Eutaw Springs historical site in Orangeburg County on Lake Marion, were deeded to the Forestry Commission and a definite program of maintenance is in operation.

The burial places of General Francis Marion at old Belle Isle Plantation in Berkeley County, of Col. Isaac Hayne in Colleton County, and of Thomas Heyward in Jasper County, are in private ownership and receive clean-up attention from the Commission.

This Division recommends that funds be made available to inaugurate a program of interpretation for the historical sites.

Visitors cannot comprehend the significance of the areas as there are no exhibits, displays or charts to depict the natural phenomena or historical advantages of the area.

The same program of interpretation should be operative at the several state parks and such recommendation is made to the Legislature.

SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Out Door Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps †	Museum	Trailer & Motor Camp
Aiken Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x			x
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x	
BARNWELL Blackville, S. C.	x	x	x	x	x	x	x				x		x		x			x
CHERAW Cheraw, S. C. { White Area. Negro Area.	x	x	x	x	x	x	x	x			x		x	x	x	x		x
CHESTER Chester, S. C.	x	x				x	x				x				x			x
COLLETON WAYSIDE PARK Canadys, S. C.	x	x				x	x											x
CROFT Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x			
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																		
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x			
GREENWOOD Ninety Six, S. C., RFD. { White Area. Negro Area.	x	x	x	x	x	x	x						x		x			
HUNTING ISLAND Frogmore, S. C. { White Area. Negro Area.	x	x		x	x		x	x				x	x		x			x
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x		x
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x			
LITTLE PEE DEE Dillon, S. C.	x	x	x	x	x	x	x											
MYRTLE BEACH Myrtle Beach, S. C.	x	x		x	x		x	x		x	x		x		x			x
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x		x			x
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x		
PLEASANT RIDGE (For Negroes) Cleveland, S. C.	x	x		x	x	x	x	x					x					
POINSETT Wedgfield, S. C. { White Area. Negro Area.	x	x	x	x	x	x	x	x				x	x		x	x		x
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x		x	
SANTEE Elloree, S. C., RFD.....	x	x		x	x	x	x	x					x		x			x
SESQUI-CENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x			
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x			x

* Where no regular barbecue pit and shelter are established, temporary arrangements can be made at all Parks.

† Two camps each at Cheraw, Kings Mountain and Poinsett.

2 Where no developed camping areas are established, temporary arrangements can be made at all parks.

N. C. STATE COMMISSION OF FORESTRY DIVISION OF STATE PARKS
SUMMARY OF STATE PARK USE JULY 1, 1958 - JUNE 30, 1959

[illegible]

007-11-6110

FOREST FIRE PROTECTION

INTRODUCTION

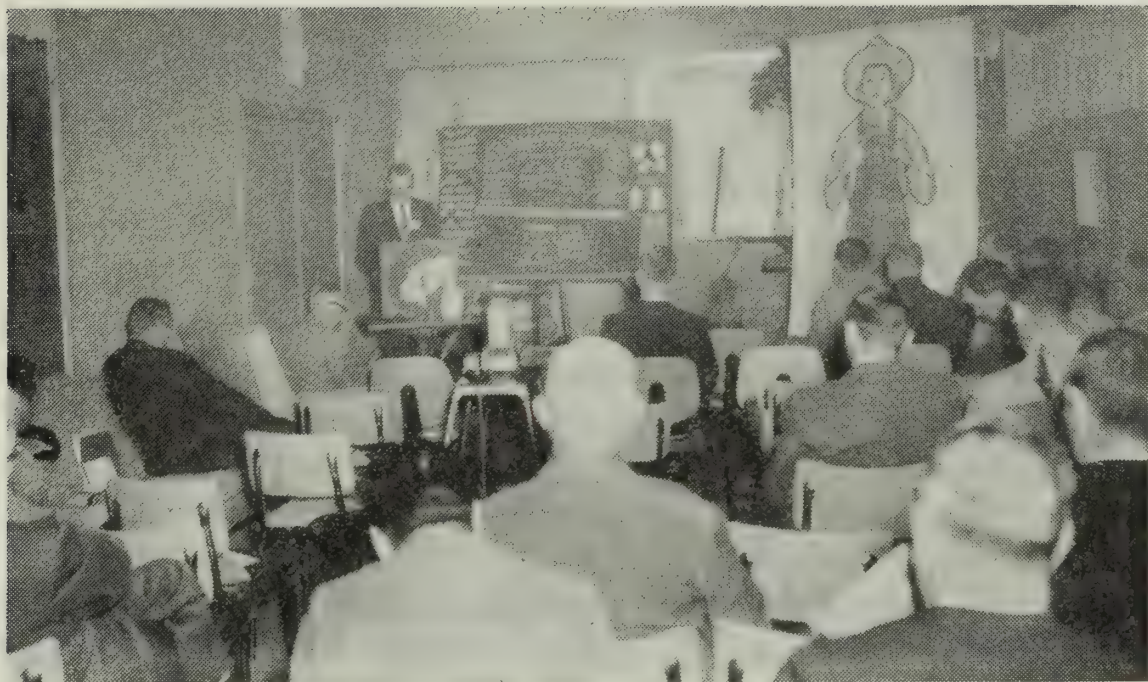
The State Commission of Forestry provides intensive forest fire protection to all timberland owners in South Carolina on a cooperative basis. Administration of all forest fire protection activities is supervised by the Fire Control Branch in Columbia. The state is divided into seven districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district. The districts are divided into county units, all of which have fire control organizations which work directly with private landowners in the prevention and control of fires on their timberlands. Even though the Commission renders protection service whenever and wherever possible, the individual landowner is not relieved of the responsibility for fires on his property. There are some 11,175,000 acres of state and privately owned timberlands in South Carolina; and with the limited number of fire control personnel and equipment available, the overall job of fire protection in the state cannot be accomplished without the assistance of the landowners and the general public. In addition to the above total, the U. S. Forest Service protects some 587,221 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

County Units:

The fire control personnel organized within each county unit represent the key individuals who work directly with timberland owners on forest fire control activities. Throughout the state, these organizations include some 46 unit rangers, 134 wardens, 68 tractor operators, and 138 towermen. In addition to the regular unit personnel listed above, some 15,979 volunteer personnel assisted the organization with the suppression of illegal forest fires during the year.

County Forestry Boards:

The five-man County Forestry Board which serves in each county renders invaluable assistance in the promotion of fire protection activities, not only in their individual counties but throughout the state. The board members are appointed by the Commission of Forestry on recommendation of the majority of the County Legislative Delegation. An annual meeting is held



The annual meeting of the State Advisory Committee of County Forestry Boards was followed by a series of district meetings where all County Forestry Board members were given a summary of matters discussed and recommended.

in July of each year to discuss and review fire protection activities in the county and to assist in the formulation of plans for the forthcoming year. All board members are kept informed of the various activities of the Commission of Forestry and are contacted periodically in connection with the work program. Many of the accomplishments in forest fire control are attributed directly to the efforts and support of the individual board members throughout the state.

State Advisory Committee of County Forestry Boards:

A number of years ago the State Advisory Committee of County Forestry Boards was formed to serve in an advisory capacity to the State Commission of Forestry in all phases of the program. This Committee is comprised of one delegate from each of the County Forestry Boards. The Committee meets annually to review and discuss the activities of the Commission of Forestry and to make recommendations to the State Forester. The budget request which will be submitted to the State Legislature during the next session is thoroughly discussed with the Committee in an endeavor to provide ways and means for conducting an effective forestry program in South Carolina.

State Forests and Parks:

State-owned forests and parks in South Carolina comprise approximately 169,574 acres. The individual Park Superintend-

ents and State Forest Directors are responsible for the protection of timberlands on these areas in cooperation with the Branch of Forest Fire Control.

Cooperative Agreements with U. S. Forest Service:

The U. S. Forest Service and the Commission of Forestry have mutually agreed to assist one another with the detection and suppression of fires which occur along either side of the national forest boundaries. In accordance with these agreements, the Commission of Forestry furnishes protection to such areas within the national forest boundaries in those localities where most of the lands are privately owned. In other areas within the national forest boundaries where most of the property is federally owned, the U. S. Forest Service assumes responsibility for protection of certain areas which normally would fall under the responsibility of the State Commission of Forestry. These agreements greatly increase the overall efficiency of the suppression efforts of both organizations.

FIRE PROTECTION ACTIVITIES

Training:

The training program carried out by all personnel is one of the necessary and valuable phases of the Fire Control Organization. Each member of the organization must be thoroughly trained so that the fire protection activities can be properly and efficiently carried out. The vast majority of the training this year was conducted on a local basis, with emphasis on training the individual for the job for which he is responsible. Individual and on-the-job training was given all employees by their immediate supervisor throughout the year. At the regular weekly ranger-warden meetings, training was a regular part of the meeting, along with preparation of weekly work plans and routine work. Each week during this meeting, the ranger gives some timely prepared training to his men, either individually or as a unit. District office personnel regularly attend these meetings and give supplemental training to the unit or to the individuals.

In October and November, a series of district law enforcement training meetings were conducted for Commission and cooperator personnel. These meetings were held by the South Carolina State Law Enforcement Division with the assistance of the Attorney General's Office and members of the Columbia Fire Control Staff.

Training is one of the most important jobs of unit rangers and other supervisory personnel. The continuous training program designed and tailored for the individual results in improved performance of all phases of fire control activities.

Inspection:

A complete unit inspection is made in each county each year. This inspection goes into great detail and covers every phase of fire control activity within a county unit. These inspections are welcomed by unit personnel. They point out the good as well as the bad. Their aim is to increase efficiency of the organization. After the inspection is made, unit rangers receive a copy of the inspection report which they use as a guide to correct any deficiencies within their unit. Many times such deficiencies are corrected on the spot at the time of the inspection. For the most part, the unit inspections are conducted by personnel of the district office with an occasional inspection being conducted by personnel of the central office.

Periodic inspection of all automotive equipment is carried out by three traveling mechanics operating out of the central shop and warehouse at Sumter. These traveling mechanics endeavor to keep all mechanized equipment in good operating condition and stress the importance of keeping the various units ready for routine and emergency calls at all times.

Fire Control Progress Checks:

Detailed district fire control progress checks are conducted periodically by the Columbia Fire Control staff. During these fire control progress checks, all phases of the fire control program are checked and discussed with the district personnel concerned. Following the inspection, a detailed report is written up and given to the district forester.

The fire control progress checks are invaluable to the district and central office staffs in analyzing the fire control program in the districts and initiating training and other corrective measures needed in carrying out the overall fire control program.

The progress checks have contributed materially toward increasing the efficiency and progress of the fire control work throughout the state.

Law Enforcement:

The Forestry Commission continued to place specific emphasis on intensifying the forest fire law enforcement program during

the year. The following steps were taken to assist in this intensification:

1. The State Law Enforcement Division continued to cooperate with the Commission in the investigation and prosecution of forest fire law violators and also in the training of Commission and cooperator personnel.
2. Procedures were worked out through which requests for assistance in investigating fires are relayed from the county in which the fire occurs through the District and Columbia Offices of the Commission to the State Law Enforcement Division. These requests are relayed by telephone or two-way radio, and a written record is maintained of each request both at the central office of the Commission and the State Law Enforcement Division.
3. The records of fire law violators were revised and brought up to date to include all of the information that is desired.
4. Training in the several phases of forest fire investigation and prosecution was given to Commission and cooperator personnel through the assistance of the State Attorney General's Office, the Solicitors of the state, and the State Law Enforcement Division.
5. In addition to group training given Commission personnel, training was also given by SLED Agents in the field while working with personnel on actual forest fire investigations. This training included forest fire investigation, interrogation of suspects and witnesses, and preservation of evidence.
6. The I & E Branch of the Commission revised and printed a new fire law poster which quotes the two primary forest fire laws for distribution to the many points throughout the state where the poster will be seen by the most people.
7. The I & E Branch also began the preparation of a booklet on forest fire laws of South Carolina which should be ready for distribution sometime during the fall of 1959.

Results of the intensified law enforcement program indicates that the Commission is getting far better investigation of the fires that occur by Commission personnel and by cooperating law enforcement agencies both as to the causes of the fires and the persons responsible for them.

A total of 402 prosecutions were made and 392 convictions were obtained for violators of the various forest fire laws for the fiscal year. Of this number, 15 prosecutions were made and

11 convictions obtained for the violation of the willful and malicious statute, and 387 prosecutions were made with 381 convictions for violations of the other forest fire law statutes. In addition to this, 12 cases involving the violation of the malicious statute are pending prosecution in Circuit Court.

Of the 4,608 fires that occurred, 196 were classified as malicious fires, 687 were classified as incendiary fires without malice, and 3,725 were classified under all other causes.

No finer cooperation could have been given the Commission in its law enforcement program than was given during the year by Chief Strom, Lt. Gasque, and Agent Kirven of the State Law Enforcement Division. Sheriffs and other law enforcement officers throughout the state were also most cooperative in assisting with the law enforcement program. As previously outlined, a considerable amount of assistance was given the Commission by the State Law Enforcement Division other than the actual assistance on the investigation of fires and which cannot be listed in statistics.

The Burning Permit and Burning Notification Laws in the twelve counties continued to be of valuable assistance to the county fire control organizations in supplying information as to the location and approximate time that burning was scheduled and planned by the landowners. Counties with permit law statutes are Aiken, Orangeburg, Georgetown, Charleston, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Counties with notification law statutes are Colleton, Hampton, and Jasper. A total of 22,442 burning permits were issued and 2,338 notifications given during the fiscal year. A total of 67 prosecutions were made and 67 convictions obtained for violation of the burning permit or notification statutes in the counties concerned. Only 69 fires were known to have escaped from the 24,780 permits or notifications issued.

Fire Plans:

All county unit organizations have a detailed forest fire control plan which outlines procedures for the control and operation of fire suppression activities. These unit plans are in the process of being revised to conform with current conditions and operating procedures.

In addition to the regular unit fire plans, a number of similar plans have been prepared for various landowners throughout the

state who want to maintain adequate protection for their timberlands. These plans follow the same general outline as the unit fire plans, in that they outline the forest fire hazard conditions which exist and also measures necessary for adequate protection from wildfires.

Legislative Forestry Study Committee—Forest Fire Control:

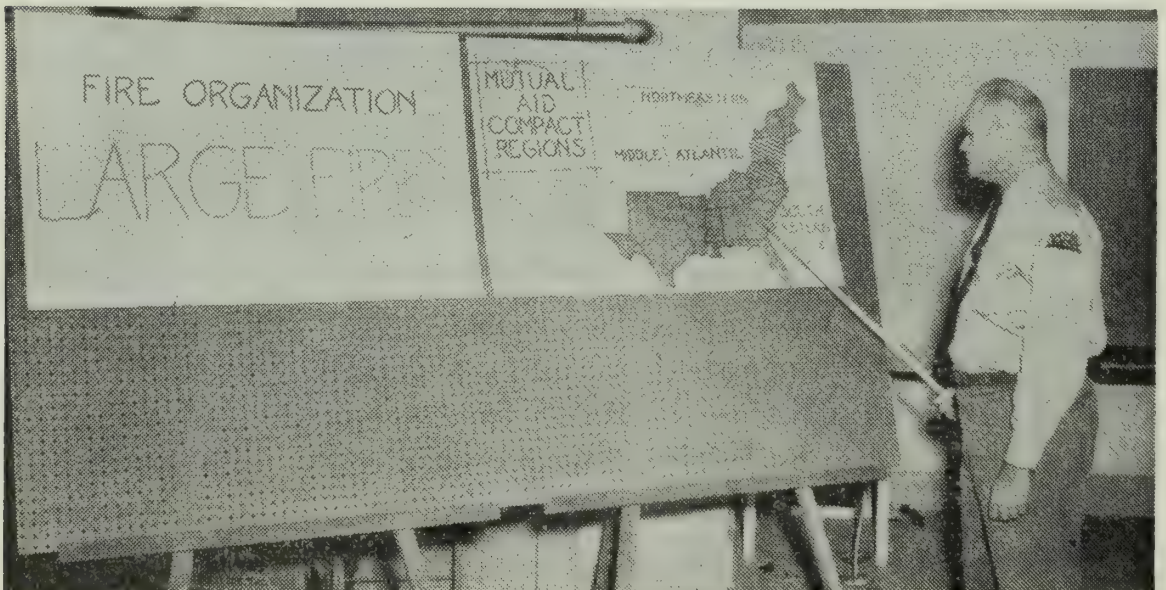
Much progress has been made in the Commission's program since the inception of the Legislative Forestry Study Committee four years ago in 1955. Much of the Commission's accomplishments were in fields of forest fire control in which the Legislative Study Committee has made studies resulting in recommendations to the General Assembly.

Southern States Fire Control Conference:

The twentieth Southern States Fire Control Conference was held at Charleston, South Carolina, in May of 1959. These annual meetings are designed to discuss fire control problems common to all of the southern states and to formulate effective measures to increase the efficiency of the program on a region-wide basis. The meeting was attended by the various State Foresters and Fire Chiefs of the Southern states, along with representatives of the U. S. Forest Service.

Southeastern States Forest Fire Compact Commission:

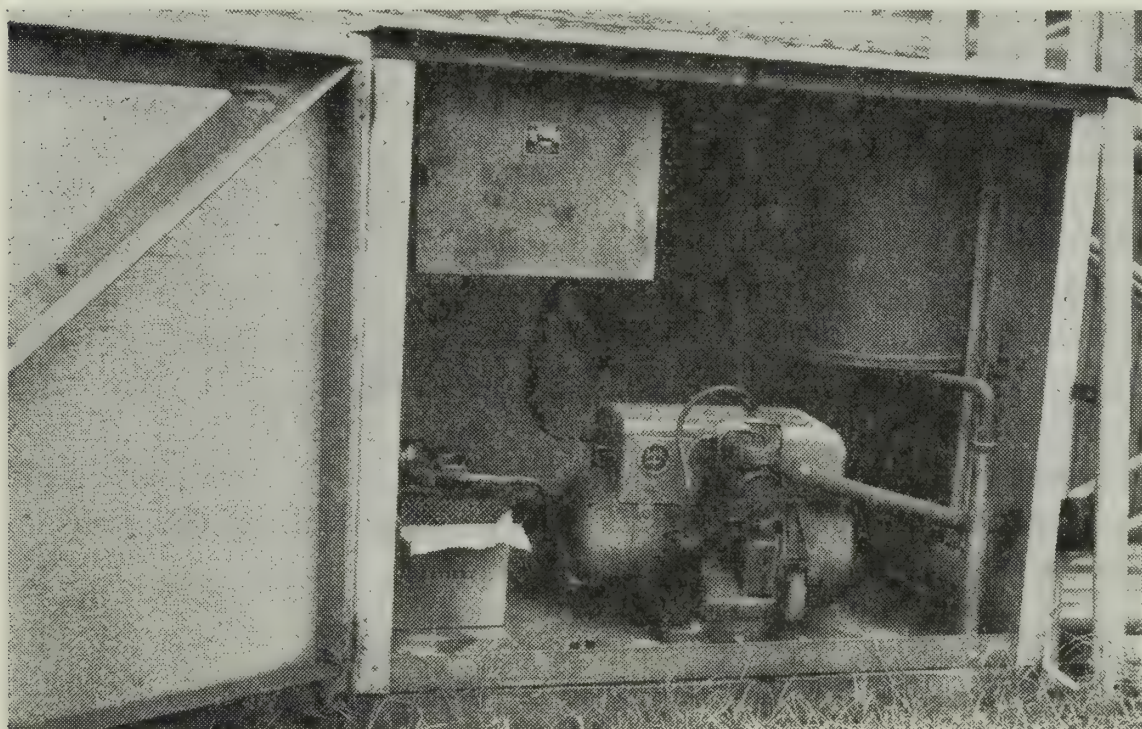
The membership of the Southeastern States Forest Fire Compact Commission from each state is comprised of a Compact Ad-



Assistant State Forester John R. Tiller participated in a series of meetings where South Carolina's participation in the Southeastern States Forest Fire Compact was discussed with county and district fire control personnel.

ministrator (the State Forester) and a four-member advisory committee. The Advisory Committee of South Carolina is comprised of Senator L. Marion Gressette of Calhoun County and Representative Don V. Richardson of Georgetown County, representing our General Assembly, and Messrs. W. L. Rhodes of Estill and Richard Coker of Hartsville, appointed by the Governor. The governing body of the Compact Commission is a five-man executive committee, headed by a chairman. State Forester Chas. H. Flory was elected to this position and served for two years. The present Compact Chairman is State Forester Gene Butcher of Kentucky. In 1957, S. D. Beichler of the U. S. Forest Service, representing the Regional Forester's Office in Atlanta, was named Compact Coordinator and is responsible for maintaining liaison between the several states relative to the status of the fire situation, availability of fire control personnel and equipment, training, etc. Implementation of the Compact calls for the development of integrated forest fire plans, the maintenance of adequate fire fighting forces by member states, provisions for mutual aid among compacting states, and, generally, for more adequate fire protection.

Representatives from all of the southern states who are members of the SSFFCC attended a four-day training meeting at



Emergency generators are located at the dispatching tower in each county and other vital radio communication points in the state in the event a general power failure should occur.

Clemson College in August, 1958, to review and adopt the Compact manual and discuss matters pertinent to the operation of the Compact. In the early fall of the same year, central office fire control personnel assisted by the Spartanburg District Forester and the Walterboro District Forester conducted a series of district training meetings to thoroughly inform all district and county fire control personnel of the organized procedure to be used in the event a large campaign type fire occurs in the state.

The ten southeastern states that have ratified the Compact Act and have now become members are Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

Civil Defense:

The two-way radio system of the S. C. Commission of Forestry is used as the second line of communications for the civil defense of South Carolina. Fire control personnel of the Commission of Forestry cooperate with the local Civil Defense Chairmen and the State Civil Defense Headquarters in relaying messages in connection with civil defense. The Commission participated in several of the Civil Defense Alerts during the year, and the radio network proved to be very successful in relaying the various civil defense messages that were required.

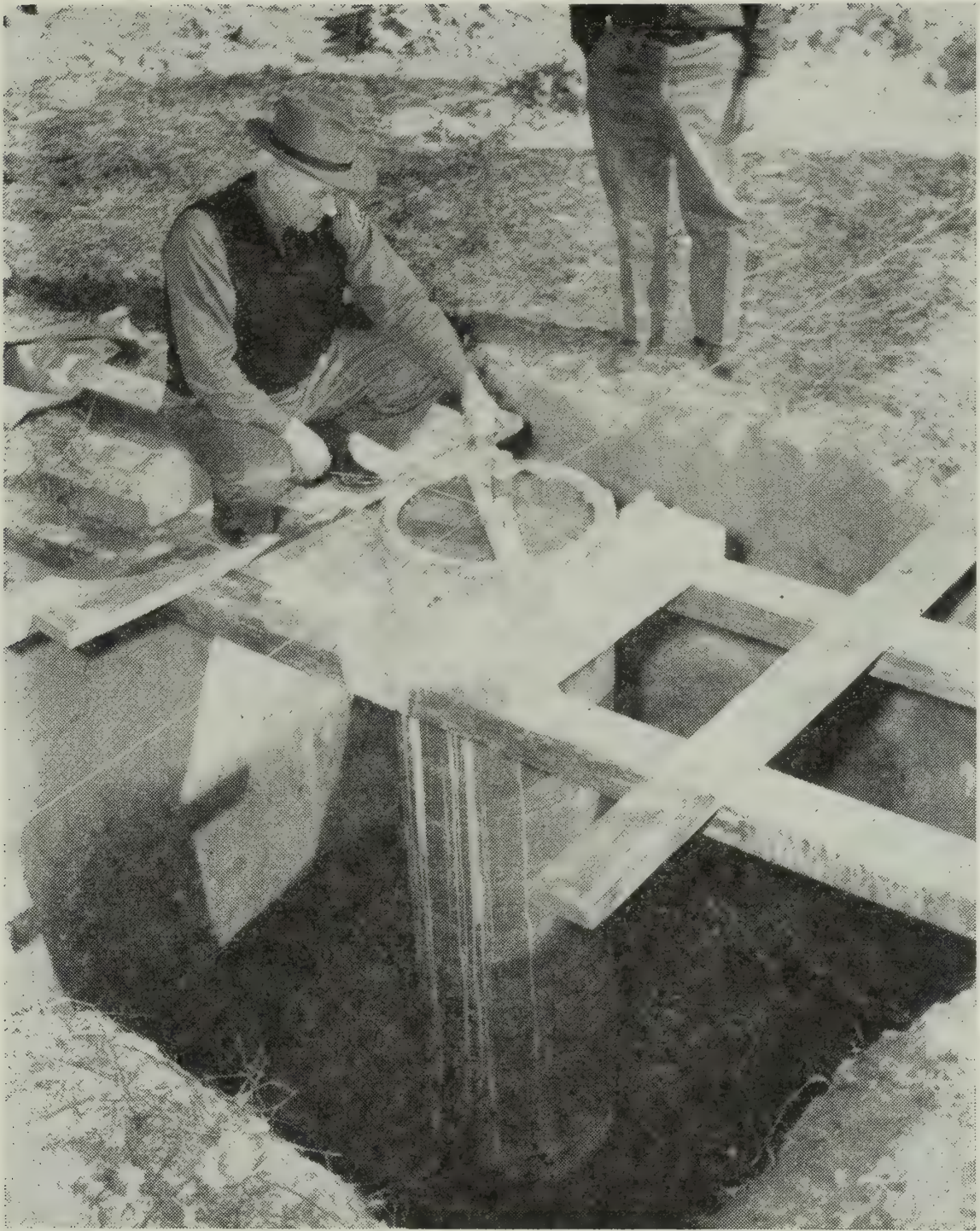
IMPROVEMENTS, TOOLS AND EQUIPMENT

Lookout Towers:

The Commission of Forestry operates 138 forest fire lookout towers in the state. During the year, one new lookout tower was erected on Hilton Head Island in Beaufort County to facilitate the detection of forest fires in that area. In addition to the state-operated towers, the U. S. Forest Service owns and operates a number of lookout units on the Sumter and Francis Marion National Forests. All towermen, both state and federal, cooperate in spotting and locating fires which occur within their visual range.

Tower Unit Buildings:

Only limited progress was made during the year with the maintenance of tower unit dwellings and outbuildings owned by the Commission. Forestry personnel are capable and available to carry out all of the maintenance work; however, the program



A good foundation is a necessity in the construction of a lookout tower. Here, the Walterboro District Ranger inspects the newly poured concrete footing at the new tower site on Hilton Head Island.

is hampered considerably due to lack of sufficient funds. These tower unit buildings are not equipped with modern sanitary facilities which are badly needed throughout the state.

ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

135 Lookout Tower Units		\$ 2,947,503
46 Fire Danger Measurement Stations		3,450
332 Miles Telephone Line		99,600
Central Repair Shop and Warehouse System		286,480
Central Radio Shop and Map Laboratory		25,000
6 District Repair Shops		30,000
Radio:		
7 Remote Control Base Stations,		
60 watt@ \$1,200	\$ 8,400	
2 Remote Control Base Stations,		
60 watt@ 1,800	3,600	
1 Remote Control Base Station,		
250 watt@ 3,600	3,600	
1 Remote Control Base Station,		
100 watt@ 2,000	2,000	
25 Base Station Units,		
50 watt@ 900	22,500	
155 Base Station Units,		
10, 25, and 30 watt@ 535	82,925	
244 Mobile Units (Single Channel)		
in Trucks and Cars@ 550	134,200	
46 Mobile Units on Tractors @ 650	29,900	
6 Mobile Units (Dual		
Channel)@ 625	3,750	
5 Portable Units@ 400	2,000	
35 Special Radio Control		
Units for Wardens@ 135	4,725	
90 Auxiliary Receivers (in		
Wardens' Homes)@ 250	22,500	
		320,100
TOTAL		\$ 3,712,133

Equipment:

During the fiscal year, five additional light crawler tractors equipped with fire suppression plows and truck transports were purchased and assigned to county use. Two additional heavy

suppression units were outfitted and assigned to the Pee Dee and Newberry sections of the state. Eleven new ranger pickup trucks were purchased as replacements for old worn-out units. Four old light tractor suppression units were replaced with new crawler-type tractors during the year. Three new station wagons were purchased for replacement of vehicles operated by radio technicians.

INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1959

2,044	Back Pack Pumps	\$ 32,620
5,014	Fire Rakes	17,220
2,669	Fire Swatters	10,656
323	Backfire Torches	6,600
10	Heavy Suppression Tractor-Plow Units w/Transports	228,000
3	Heavy Dozers	80,000
1	Medium Suppression Tractor-Plow Unit w/Transport	20,800
69	Light Tractor-Plow Units w/Transports.....	520,950
1	Heavy Lowboy Truck-Transport	10,000
45	Ranger Pickup Trucks	78,750
1	¼-ton Jeep	2,250
7	Sedan Delivery Trucks	14,000
3	2-ton Stake Body Trucks	7,650
16	½-ton Pickup Trucks	28,000
1	300-gal. Tanker-Trailer w/Pump	1,200
1	Mobile Field Headquarters Unit	3,200
TOTAL		\$ 1,061,896

Equipment Maintenance Shop:

The Fire Control Branch operates a Central Repair Shop at Sumter where heavy and specialized repairs are made to all fire control equipment. Three traveling mechanics, headquartering at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator and the district mechanic, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 739 complete field inspections of equipment and conducted 888 field repair jobs.

The central shop personnel at Sumter made many repairs to automotive equipment owned by the Commission and manufactured many items necessary for field use. Some of the work handled by the mechanical force is listed below:

Major repairs were made to 38 light tractors, 11 heavy tractors, 76 light trucks, 31 heavy trucks, 8 light plows, 5 heavy plows, 1 light trailer, and 4 heavy trailers. Minor repairs were made to 1 light tractor, 15 light trucks, and 5 heavy trucks.

District Repair Shops:

During the fiscal year equipment maintenance shops were completed at each of the seven district headquarters. These new facilities will be used for warehousing certain materials and supplies necessary for the efficient operation of each of the Forestry districts and by the tractor operator-mechanics who in addition to operating the heavy suppression units are responsible for maintenance of all mechanized equipment in the district. The traveling mechanics who operate from the Central Repair Shop at Sumter will also use the shops in assisting the local mechanics to more effectively keep all motorized equipment in good operating condition at all times and to make any necessary repairs which may be needed locally.

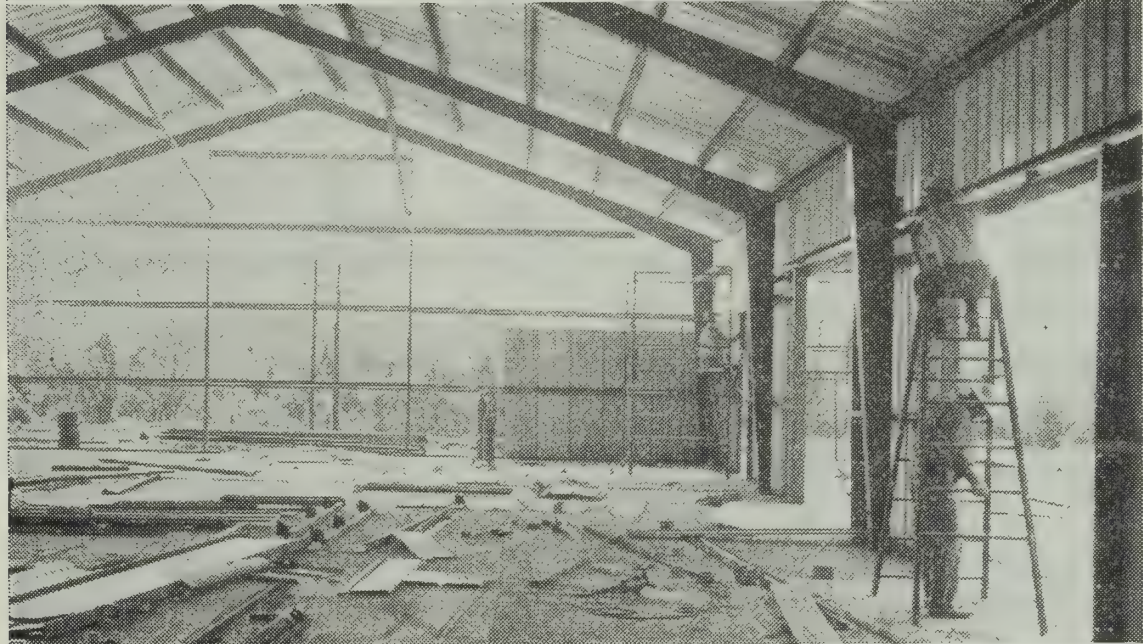
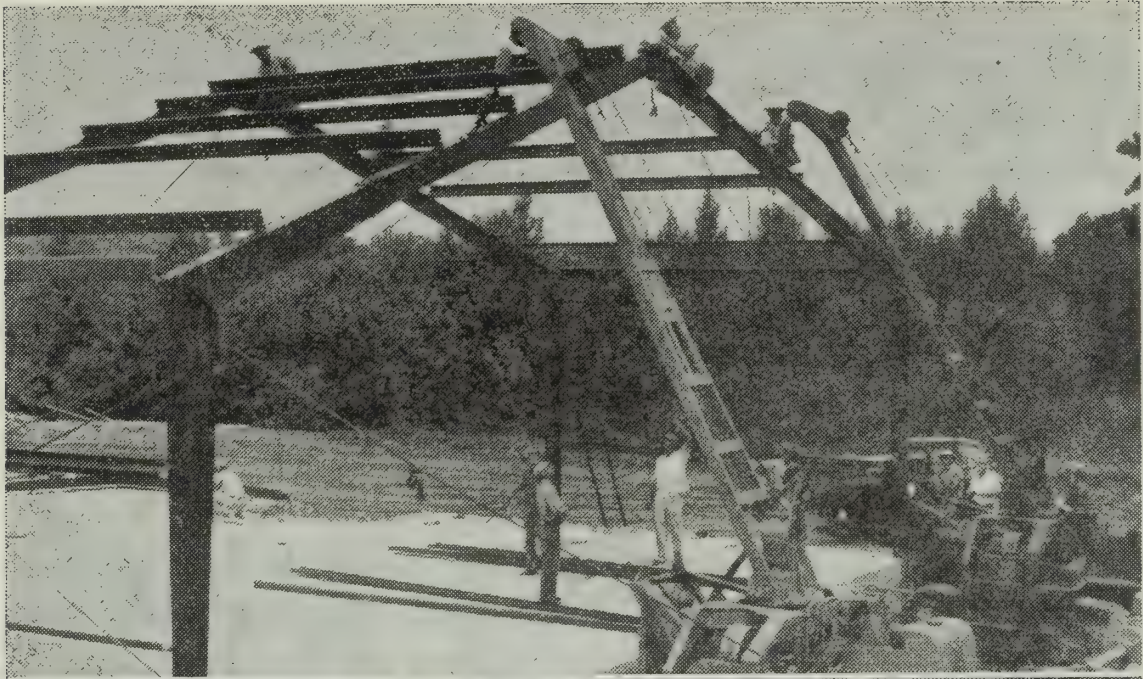
Columbia Radio Repair Shop:

During the fiscal year a new Central Radio Communications Maintenance and Repair Shop was erected at 241 Catawba Avenue in Columbia. This building will be used as a central headquarters for all radio communications installations, maintenance, and repairs for the entire state as well as serving as headquarters for the radio technician responsible for maintenance in the central portion of the state. This central radio service facility will work in close coordination with existing district radio repair shops and technicians.

One section of this radio repair building is to be used as a new map laboratory in which all maps used by all fire control personnel throughout the state will be manufactured and supplied.

Telephone Lines:

The telephone system of the Commission of Forestry has been considerably reduced in mileage over the past several years by replacement with two-way radio. However, at the end of the



Steel and concrete go to make a substantial new shop for the maintenance and repair of radio communication equipment and the production of detailed maps needed in the Commission's fire detection and suppression program throughout the state.

fiscal year, the Commission continued to maintain in operation 332 miles of line along with associated instruments, etc., for providing services essential to the Commission's activities and for which radio is not suited.

There were no major changes made to the system during the year such as construction of new lines or salvage of old ones. The usual routine maintenance program was carried on during the year by personnel of the Commission in such manner that service was satisfactory on the lines throughout the year.

Radio:

During this year a complete preventive maintenance program was begun on every Forestry Commission radio as well as those of cooperating companies operating on forestry channels.

An additional district radio repair shop was established at Orangeburg to facilitate equipment maintenance in that area. This shop is operated by one of the technicians formerly located at Columbia.

Routine repairs and reinstallations as well as frequency and modulation measurements rounded out a very active year in the two-way radio system.

Use of Aircraft in Fire Control:

Radio-equipped planes are used on a contract basis when necessary to supplement the lookout towers. During periods of low visibility towers cannot adequately cover their area of responsibility and, without the use of airplanes, many fires would occur and burn for a long period of time undetected before they are accidentally discovered and reported to the fire control organization. Whenever large fires occur, planes are also used to direct the actions of the ground suppression forces. During periods of high fire occurrence, air observers direct fire suppression personnel to those fires which need greatest attention and assist them in organizing their plans of attack.

Fire Danger Measurement:

Fire danger measurement stations are located in each county of the state. Readings are taken at these stations twice daily and the information disseminated to all fire control personnel to keep them informed of current degrees of fire danger. Fire control personnel use this information to determine the probability of fire occurrence and also the expected rate of spread in the

event fires occur. Accordingly, personnel are better able to plan their daily work activities and when necessary, make themselves available for immediate fire call. Class fire days are rated from 1 to 5, with 1 the lowest and 5 representing the highest degree of fire danger. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the 5 major ratings: 186 Class No. 1 days; 116 Class No. 2 days; 54 Class No. 3 days; 9 Class No. 4 days, and no Class No. 5 days.

Legal Fires:

Legal fires are all fires, without regard to reason for burning, which are previously authorized by the landowner and started by him or his authorized agent and which burn entirely upon his land. A total of 1,638 fires which burned 172,959 acres were conducted by individual landowners during the year and recorded by county unit personnel. Four hundred fifty-two fires which burned 58,676 acres were conducted on various areas for the purpose of hazard reduction. Some 266 fires burning 91,585 acres were handled on hunting preserves for the purpose of improving woodland conditions for hunting and the management of game. Burnings conducted to rid timber areas of accumulated debris and rubbish accounted for 572 fires which burned 3,888 acres. Burning of timberland areas for grazing purposes accounted for 218 fires which burned 15,039 acres. One hundred thirty fires which burned 3,771 acres were conducted for miscellaneous purposes such as the destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

South Carolina experienced normal fire occurrence during the fiscal year; however, the acreage burned represented the second lowest ever recorded in the state. A total of 4,608 fires burned 39,612.3 acres of forest land or 0.35 per cent of the total forest area under protection. The average size of these fires was 8.6 acres. The summer months were relatively quiet as is expected during a normal fire year; however, moderate to high fire occurrence was experienced during the months of November and December, which is somewhat contrary to the general trend experienced during the past ten or twelve years. Moderate fire occurrence continued on through the month of March and began to subside in April.

The highest rate of fire occurrence was experienced in Orangeburg County where 365 fires burned 4,109.7 acres. Other counties with high rates of fire occurrence were Aiken with 216 fires burning 1,575.2 acres, Berkeley County which experienced 237 fires burning 2,678.2 acres, Greenville County with 222 fires which burned 864.7 acres, and Sumter County with 207 fires burning 1,572.0 acres.

The lowest fire occurrence was experienced in Newberry County where 19 fires burned 99.4 acres during the year. With the exception of Greenwood County which lost 96.8 acres, this represents the lowest acreage burned in the state.

Smokers continued as the major cause of illegal forest fires in the state during the fiscal year. This cause was closely followed by debris burning which accounted for 29.8 per cent of the fires which were recorded. The percentage of fires attributed to incendiarism dropped from 34.7 per cent for fiscal year 1957-58 to 19.2 per cent for the current fiscal year.

Even though moderate precipitation was experienced throughout the state, the year ended with a deficiency of 1.8 inches below normal. The 47.03 inches which fell during 1958-59 can be compared with the state average of 55.18 inches which was recorded during the previous fiscal year. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

Month	Amount Rainfall (Inches)	Departure from Normal (Inches)
July	7.09	+ 1.32
August	4.86	— 0.80
September	1.83	— 2.20
October	2.48	— 0.33
November	0.91	— 2.00
December	3.40	— 0.77
January	3.07	— 0.70
February	5.03	+ 1.22
March	6.63	+ 2.09
April	3.59	— 0.18
May	4.96	+ 1.48
June	3.18	— 0.93
TOTAL	47.03	— 1.80

A five-year summary of precipitation by fiscal years is shown below:

Year	Amount Rainfall (Inches)	Departure from Normal (Inches)
1954-55 -----	37.69	— 9.57
1955-56 -----	43.16	— 4.01
1956-57 -----	43.15	— 4.02
1957-58 -----	55.18	+ 7.93
1958-59 -----	47.03	— 1.80
<hr/>		
Average -----	45.24	
Total Accumulated Deficiency -----		—11.47

FOREST MANAGEMENT

SUMMARY

The Commission of Forestry continued to direct the major part of its forest management program to assisting small, private woodland owners with their forest management problems. There was no appreciable change in the type of ownership of the woodland areas in the state. Industrial ownerships control approximately twenty per cent (20%); all types of public ownership control seven per cent (7%) and the small ownerships control the remaining seventy-three per cent (73%) of the woodland area. According to the most recent information available, most of the public, industrial and larger land ownerships are handling their woodland areas as they should for maximum forest production. The greatest problem still exists among small woodland owners who control seventy-three per cent (73%) of the woodland area.

Technical forestry personnel of the State Commission of Forestry offer forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to either improve the stand, maintain it in a productive condition, harvest timber products, or any reforestation work necessary on idle or under-stocked areas.

Five years ago the Forestry Commission had 13 men working full time on this program. They were able to assist between 1,200 and 1,300 landowners, or the rate of almost 100 landowners per person. During the last five years, the Commission has been given the responsibility to assist with the Agricultural Conservation Program, which makes incentive payments to landowners to carry out certain necessary conservation practices. The Commission's responsibility here is to examine the areas upon which landowners plan to do scrub oak conversion, timber stand improvement, interplanting of trees, or construction of firebreaks. The Commission must determine whether the practice is needed on the area, then follow up to see that the practice is properly completed. In 1958 Commission foresters assisted on approximately 2,400 A.C.P. requests. Regular management requests increased to 1,693 cases from 1,300 cases five years ago. An increase in only three men, making a total of 16, has been possible to

help handle 300 additional regular management cases, plus 2,400 A.C.P. requests. The three additional men were employed through the use of federal funds.

Present personnel cannot keep up with these requests for assistance, being three to six months behind in some areas. At least four additional men are needed at present just to keep up with requests. This forest management assistance program is one of the most important activities in reaching small landowners with forestry assistance.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowner to employ a private forester. Commission foresters also work closely with industry conservation foresters who give direct assistance to landowners.

The Commission has followed the policy of recommending consulting foresters to be employed by private landowners wherever possible. We believe that forestry can and will pay its own way when areas are brought into full production. It is believed that the large number of consulting foresters in South Carolina (42) is one of the primary reasons why South Carolina is one of the more progressive states in the nation in forest management. The Commission will continue its policy of encouraging the employment of consulting foresters on all properties where the cost to employ a consultant will be justified. Commission foresters will continue to concentrate their activities to promote interest among small landowners in doing better management work and in direct assistance to those with small timber areas.

A meeting of landowners, businessmen, and professional people was held in Columbia on September 17, 1958, to discuss ways and means of selling the small landowner on the use of better forest management practices. A statement of comments concerning the recommendations made by these people will be found in the Information and Education section of this report.

No large number of technical personnel left the Commission during the year. There was some turnover, however, particularly due to military service commitments by some personnel. If personnel continues to become more stable, the Commission management program will be benefited.

During the year Commission foresters made woodland examinations on 1,693 separate woodland areas covering approximately 196,529 acres. A total of 18,522,478 board feet of sawtimber and

6,419 cords of pulpwood was marked for private landowners. This was a new high in the number of separate woodland examinations made and in the number of separate tracts marked. Commission foresters referred 227 landowners to consulting foresters and referred 115 landowners to industry foresters. These cases consisted primarily of tracts that were large in area and which would have tied up the Commission forester for many days if he had undertaken the complete job. The Commission continued the policy of referring as many jobs to consulting foresters as possible.

Landowners continued to receive excellent prices for selectively marked sawtimber and pulpwood. Average sawtimber prices reported were above the last ten year average. A study of factors relating to sawtimber prices is continuing by the Southeastern Forest Experiment Station in cooperation with the S. C. State Commission of Forestry. The purpose of the study is to determine what effect quality, amount of sawtimber per acre, size of trees, distance to nearest town, and other factors might have on the price received. Prices for selectively marked timber average considerably higher than those for timber that was sold without the benefit of a forester's estimate. Some very worthwhile information has already been obtained from this study and more is expected.

The Forest Survey field work was completed for S. C. and a preliminary release of information made. The information obtained indicates some significant changes in forest conditions during the last ten years. The major changes were the continued slow decrease in larger pine sawtimber volumes, an increase in hardwood volumes and the increase in cull trees in our woodlands. This last item probably constitutes the greatest single problem in forest management today. This is particularly true on the small woodland ownerships. Commission foresters have been working on this problem and making some progress. Even more effort will be devoted to helping landowners solve this problem.

An important step was made toward controlling insects and disease when a three-way agreement for cooperative control was signed between Clemson College, the U. S. Forest Service, and the Commission of Forestry. Under this agreement, Clemson will employ a Forest Entomologist and Pathologist and will plan and coordinate detection and control activities. The Forestry Commission will assist in detection and control. The U. S. Forest Service will assist with some funds if epidemic conditions arise.

The Commission employed a research forester during the year. This man will devote considerable time to the Sand Hills area.

Clemson College, through its technical staff, has expanded its research efforts on forestry. The Commission is working with Clemson on a number of nursery and management research studies at present.

The small watershed program continues to expand. The Wateree Creek area was approved for action in 1959-60. Brushy Creek, in Anderson County, began an action program in 1958-59. A total of four projects are in operation and one or two more are expected to be approved within a year. The Commission of Forestry is responsible for all technical forestry work on these watershed areas, including tree planting on critically eroding areas.

New working agreements were completed with a large number of the state's Soil Conservation Districts. Through these agreements, the Commission offers technical forestry assistance on woodland areas to all district cooperators.

An up-to-date list of sawmills and veneer mills for the State was made by Commission personnel working with the Extension Foresters. This information was much needed and will be of considerable help to landowners.

The State Commission of Forestry continued to operate four state forests. The combined area of these state forests represents about one per cent of the total forest area in the state. Experimental and demonstration plantings, forest management experiments and other activities were continued on these forests. Since about 40% of the total land area in the state forests is still in an unproductive state, major emphasis continued to be directed toward reforesting this non-productive area. A total of 459 acres of scrub oak land was cleared during the year and has been, or will be, planted to pine. During the past ten years a total of some 5,000 acres of state forest lands has been cleared of worthless scrub oak and converted to pine stands.

MANAGEMENT ASSISTANCE

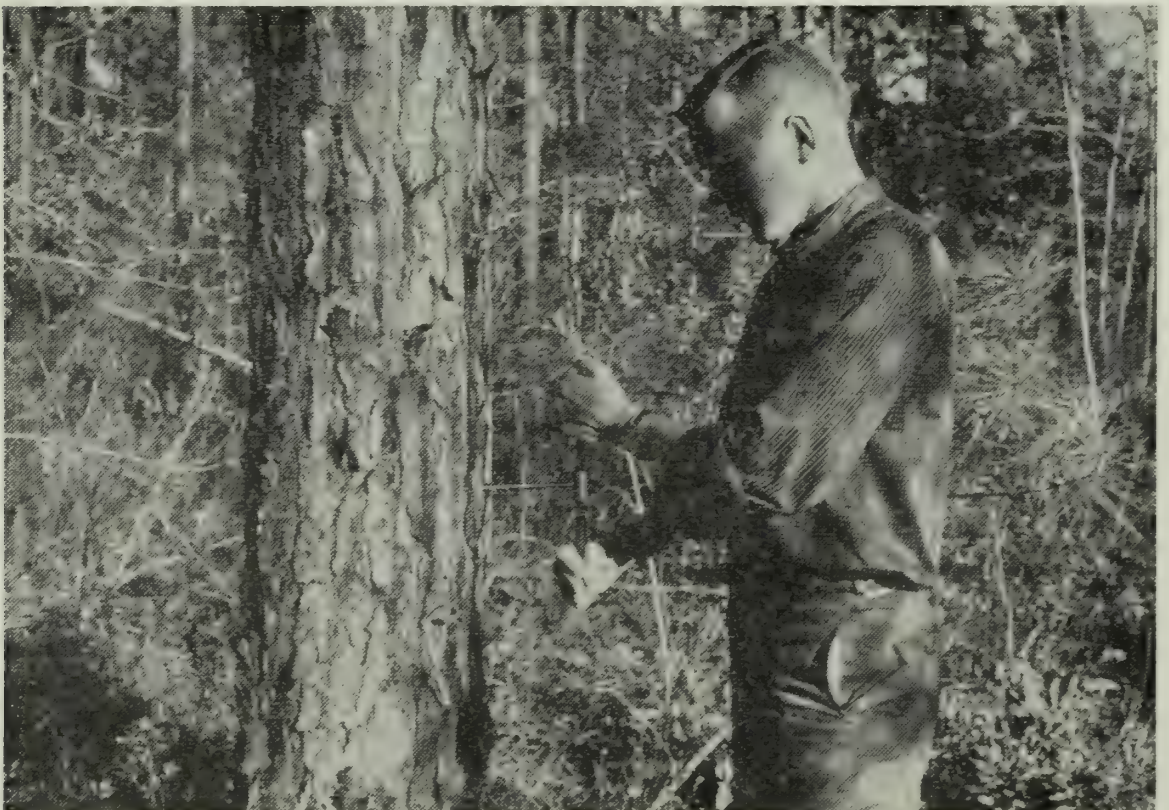
The major emphasis of the Forest Management Branch activities was again directed toward assisting private landowners with their woodland management problems.

Foresters of the State Commission of Forestry and the Clemson College Extension Service cooperate in helping landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is fifty cents per thousand board feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seedbed preparation, control of the "Brown Spot" disease in longleaf pine, and reducing fire hazards. Recommendations for



Commission foresters made woodland examinations on 1,693 tracts having a total of 196,529 woodland acres. A detailed management plan was prepared on each tract.

the use of prescribed fire are made only after very careful analysis, with the landowner, of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and district office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,100 telephone calls regarding insect and disease control and made more than 242 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

During the year, Commission foresters made 1,693 woodland examinations on 196,529 acres of forest land, and selectively marked 18,522,478 board feet and 6,419 cords for 403 landowners on 14,374 acres of forest land. The following table shows the continuous increase in woodland examinations and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature. The number assisted this year is the largest number ever assisted in one year.

FOREST MANAGEMENT ASSISTANCE

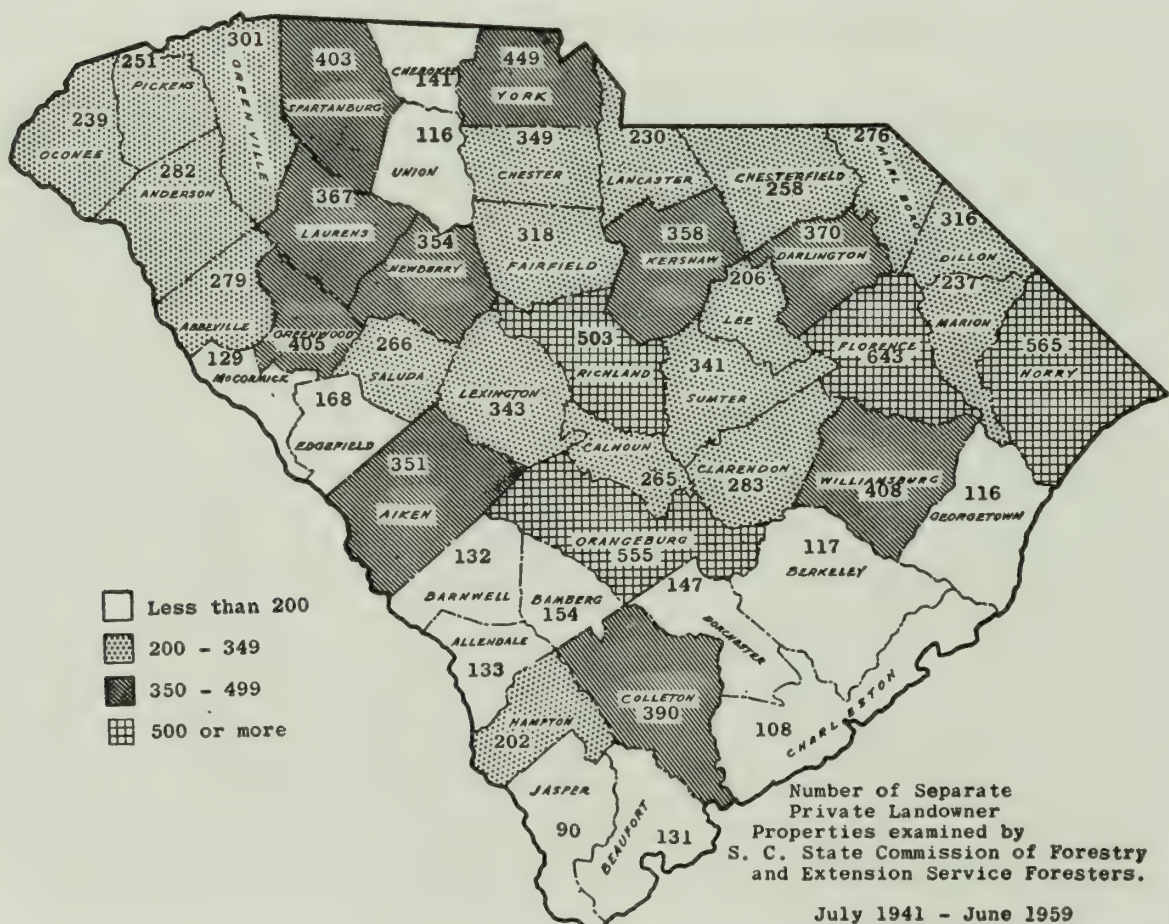
Summary By Years

	Examinations & Recommendations		Timber Marking		Cords Pulpwood
	No. of Landowners	Woodland Acreage	No. of Landowners	Woodland Acreage	
1941-42	213	37,500	84	14,792	8,271,202
1942-43	145	62,204	59	8,769	13,851,707
1943-44	170	85,300	121	15,407	25,515,145
1944-45	309	161,412	108	15,359	16,033,407
1945-46	256	80,800	78	12,591	15,292,532
1946-47	445	105,896	203	18,408	24,735,103
1947-48	545	148,577	208	13,477	19,788,388
1948-49	706	126,600	235	13,768	22,009,336
1949-50	880	163,334	242	8,427	13,283,940
1950-51	998	173,057	339	14,275	19,634,153
1951-52	919	170,948	288	11,931	18,031,822
1952-53	931	142,054	315	12,109	16,332,715
1953-54	945	143,347	331	8,864	12,264,641
1954-55	1,166	184,754	399	9,477	13,875,377
1955-56	1,322	191,143	393	10,973	16,246,795
1956-57	1,148	163,479	304	8,248	11,365,157
1957-58	1,423	208,821	394	12,305	14,443,209
1958-59	1,693	196,529	403	14,374	18,552,478
Totals	14,214	2,545,755	4,504	223,554	299,527,107

Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to destroy the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees. This cull tree removal program is probably the largest single forest management problem facing South Carolina woodland owners. Commission foresters will continue to place more emphasis on this problem.

Cooperative work with the Agricultural Conservation Program was continued during the year. A record increase was noted in the number of landowners requesting forest practices through this conservation program. It is expected that this will continue to increase for the next year or two. Through this program, substantial progress is being made on many properties to control worthless species.

Commission foresters were unable to service all of the requests from landowners. The tremendous increase in requests to assist landowners with clearing scrub oak land, timber stand improvement work or cull tree control, tree planting, etc., plus an increase in requests for sawtimber and pulpwood marking, has resulted



in many requests not being handled for three to six months after being received. Some landowners do not wait to receive the assistance and consequently, poor management practices result. A minimum of four foresters are needed at present to just keep up with present requests for service from small woodland owners.

Commission foresters and Extension foresters continued to follow the practice of referring all larger jobs and some of the smaller jobs to consulting foresters and industry foresters wherever practical. Our records indicate 227 jobs referred to consulting foresters where properties were examined by Commission or Extension foresters, and it is estimated that about 80 additional jobs were referred directly to consulting foresters where original contact was made by Commission or Extension personnel. One hundred fifteen jobs were referred to industrial foresters.

Stumpage prices received from marked sawtimber and pulpwood for the past five years are shown in the following table:

SAWTIMBER AND PULPWOOD STUMPAGE PRICES FOR SOUTH CAROLINA—FIVE YEAR PERIOD

Fiscal Year	Weighted Average Stumpage Price Per M Bd. Ft.	Weighted Average Stumpage Price Per Standard Cord
1954-55	\$32.50	\$4.09
1955-56	35.91	4.89
1956-57	37.37	5.49
1957-58	35.72	5.86
1958-59	37.00	5.75

Timber prices remained steady during the year. Demand for timber was good during most of the year with some increase noted in May and June. High quality sawtimber continued to bring premium prices. The average price for marked sawtimber sales was the second highest on record and was only slightly less than the highest prices ever received. There were still large numbers of forest landowners who sold timber without proper technical assistance and who sold all timber to a low diameter limit. Reported prices per thousand for these sales were considerably less than prices received for marked timber.

Pulpwood demand was fair during the year. Some pickup in the market occurred in the spring and it is expected that demand will continue about normal. Overall production of pulpwood and chips in 1958 was only slightly greater than 1957 production. There was a sharp increase in the use of chips and sawmill residue for pulping. Stumpage prices for pulpwood up to

\$8.96 per cord were received. Most pulpwood sales, however, averaged about \$6.00 per cord stumpage for the low country and Sandhills section and about \$5.00 for the upper Piedmont.

Demand for poles remained about the same and there was little variation in prices paid. Demand for small poles and fence posts continued to improve; however, demand for posts was limited to a small number of counties.

LUMBER AND PULPWOOD PRODUCTION BY YEARS

	Lumber M bd. ft.	Pulpwood Cords
1942	1,079,351	946,000
1943	984,733	985,000
1944	850,748	1,053,000
1945	723,667	877,500
1946	1,005,700	955,700
1947	871,014	948,388
1948	798,700	1,108,523
1949	1,002,000	1,012,180
1950	997,000	1,182,413
1951	1,100,000	1,251,045
1952	958,000	1,275,698
1953	921,000	1,446,157
1954	950,000 est.	1,330,888
1955	1,000,000 est.	1,513,313*
1956	900,000 est.	1,806,571*
1957	850,000 est.	1,743,004*
1958	900,000 est.	1,747,800*

The production of sawtimber is estimated at about equal to the 1956 production, and some ten per cent below the average production for the past ten years.

There were no new large sawmills located within the state during the year; however, work was continued on the construction of the Bowaters Carolina Corporation pulp mill, and this mill began production.

The average size of logs now available to sawmill operators is smaller than in past years. The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the Forestry Commission's landowner assistance program is to help guide private forest landowners to manage their

* Includes chips, etc., residue from sawtimber operations.

woodlands so that the highest financial returns can be obtained over a long period of time. The number of landowners availing themselves of this service is steadily increasing.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired either full or part-time foresters.

The pulp companies continued to furnish the services of their foresters to assist landowners with proper thinning of pulpwood. It is the responsibility of these foresters to help sell private owners on the idea of "sustained yield" in managing their woodlands. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

Commission foresters in the field offices and in the central offices checked in the field approximately 242 separate properties for insect and disease damage. Recommendations were given the owners regarding treatments necessary to control or check



With continued high demand, timber large enough for the production of dimension material became increasingly hard to secure as the average log became smaller than in past years.

the spread of the diseases or insects. More than 1,100 telephone calls were answered regarding insect or disease where no field check was necessary. There were no epidemics of disease or insects during the year; however, Ips and Southern Pine Beetle attacks killed many trees during the summer and fall of 1957. A check for Oak Wilt was continued but none was located in South Carolina. Clemson College has been given authority to handle any control work necessary for forest diseases and insects. Commission foresters will cooperate with Clemson in this work under the terms of a working agreement that has been executed by both parties.

A training school was held for all technical personnel with instruction handled by the central office staff. The training at this school was designed primarily to better equip the Commission's field foresters to assist the small landowner. In addition to this group training, periodic individual training and inspection was given to all field foresters.

COOPERATIVE FOREST MANAGEMENT

During the year, 15 Cooperative Forest Management Projects were operated in the state. One of these projects had an additional man for most of the year, making 16 foresters working full time on forest management assistance to private owners. There was some turnover of personnel, but replacements were secured with little delay. The demand by private owners for services offered by these men was greater than could be met during the year. A minimum of four new men is needed now just to keep up with requests that are being received. A summary of the work accomplished by these Cooperative Forest Management Foresters is included in the forest management assistance tables shown in this report.

AGREEMENTS WITH SOIL CONSERVATION DISTRICTS

Ever since Soil Conservation Districts were first formed in South Carolina, the State Commission of Forestry has provided advice and forestry services to District Cooperators. To facilitate this cooperation formal memoranda of agreement were entered into by the State Commission of Forestry and a number of Soil Conservation Districts in the state. Up to 1950, such agreements had been completed with 14 Soil Conservation Districts. However, as District work was intensified by dissolving the larger District (consisting of two or more counties) and organizing new

Districts consisting of single counties, no new agreements were signed. Nevertheless, excellent cooperative relationships between the Forestry Commission and Districts have been continued and intensified, even without the benefit of written agreements. What has been lacking mostly has been coordinated plans of work, and to more fully execute such plans.

Within the past decade most phases of the Forestry Commission's activities have expanded considerably. Assuming that this level of service will be maintained, and possibly even further intensified in the future, the Commission wanted to continue to offer its complete services of personnel, equipment and facilities to all Districts of the state to mutually develop to their full potential the woodland phases of each District Cooperator's farm plan.

Therefore, the governing board of the Commission of Forestry, at a meeting held on June 18, 1958, authorized and directed the State Forester to explore ways and means to enter into new memoranda of agreement with each of the Soil Conservation Districts in the state. A suggested agreement was drafted, discussed with, and approved by the State Association of Soil Conservation District Supervisors and by the Commission. The Commission then contacted the Supervisors of each of the 45 Soil Conservation Districts in the state and offered to execute agreements.

The Commission believes that the formalizing and furthering of cooperative efforts between Soil Conservation Districts and the State Commission of Forestry is an important step in improving the forestry practices on small woodland holdings in South Carolina.

As of June 30, 1959, nineteen Soil Conservation Districts had entered into memoranda of agreement with the Commission, and many other Districts had indicated their intention of considering this matter at future meetings.

The Commission feels that the job of conserving and developing our natural resources of soil, water, forests, and wildlife is a job so big, so varied, and so vital that cooperation and teamwork by *all* organizations, groups, and individuals engaged in *any* phase of conservation is essential if maximum results are to be achieved.

In the past there have been many examples of cooperation and teamwork between forestry interests and Soil Conservation

Districts and cooperators in South Carolina. Undoubtedly such teamwork and cooperation has helped to advance the cause of conservation significantly in our state. But in spite of the excellent progress made in the past, there is no room for complacency. We all realize full well that we are still far from our goal of having every acre of land used according to its capabilities and treated according to its needs.

However, in view of the past fine spirit of cooperation and teamwork between the Soil Conservation Districts and the State Commission of Forestry, the Commission looks forward not only to continued cooperation and progress, but also confidently looks forward to making significant strides toward reaching our common goals.

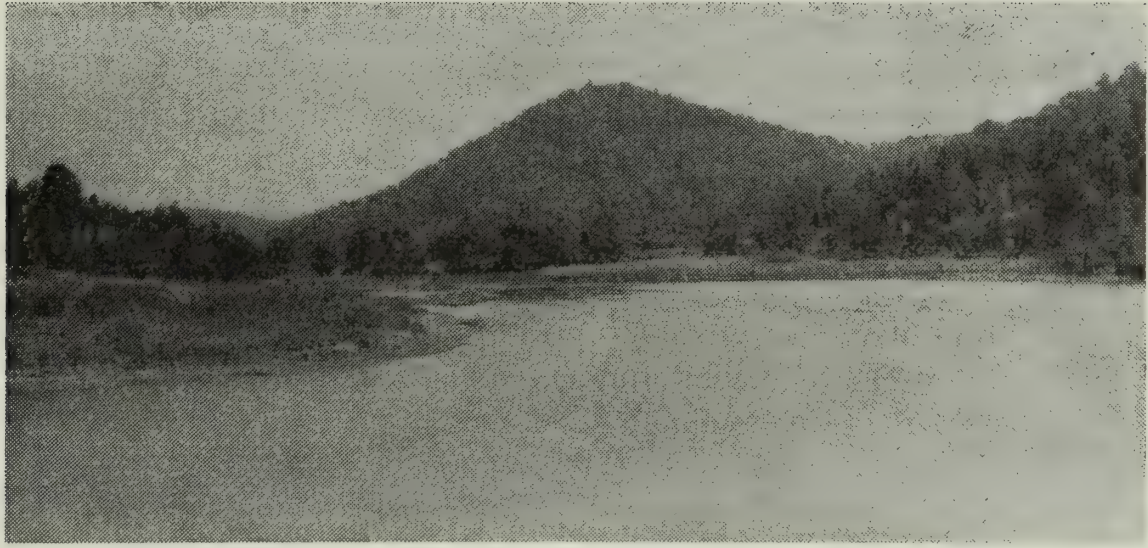
WATERSHED PROJECTS

A program to control water on the small watersheds and to protect from over flow the bottomland along the smaller streams was initiated some years ago through Public Law 566. The Soil Conservation Service and U. S. Forest Service are the primary action agencies for this program. The U. S. Forest Service has transferred their responsibilities to the S. C. State Commission of Forestry through an agreement. There are two Public Law 566 projects in operation in the state and the Pilot Watershed Project is being continued.

There have been preliminary examinations on 18 separate areas to determine the feasibility of beginning new watershed improvement works on these areas. One new project (the Brushy Creek Area) was set up for action during the year. A statement follows describing some of the activities accomplished on the three areas in operation.

TWELVE MILE CREEK PROJECT

The Pilot Watershed on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the U. S. Forest Service and the Soil Conservation Service. A total of 493,000 seedlings was planted on 470 acres of badly eroded and gullied land within the project boundaries. A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover could be established. In addition to this work, the Project Forester assisted four landowners in properly marking and selling sawtimber and pulpwood. A total of 132,000 board feet of sawtimber was marked for these four owners.



Small ponds, grass and trees help control water and prevent flooding along smaller streams. Grass was planted along the banks of this pond to prevent silting until planted trees could do a permanent job.

However, many tracts were marked for pulpwood thinning by pulpwood company foresters, with the project forester checking the work. In addition, recommendations for planting, brush control and other measures needed on some of the woodland areas were given to many landowners.

CONEROSS CREEK PROJECT

The Coneross Creek Project completed its second year's operation. The work on this project was under the supervision of the same project forester who handles the Twelve Mile Creek Project. The Coneross Creek area is located near Walhalla, so there was not too much additional travel from the Twelve Mile area. This allowed the same person to supervise both project activities. A total of 692,000 trees was planted on 860 acres of gullied areas in this watershed. Forest management assistance was given to 16 landowners and 333 cords of pulpwood and 22,363 board feet of sawtimber were marked for 12 landowners.

BRUSHY CREEK PROJECT

The first year's operation on the Brushy Creek Watershed Project began in February. Charles W. Nuite was appointed forester for this project February 10, 1959. The project is operated as a cooperative effort between the U. S. Forest Service and the Pickens and Anderson Watershed Districts. A working agreement between the three parties involved was completed on February 9, 1959.

A total of 107,000 seedlings were planted on 102.6 acres of badly eroded lands. Two woodland owners were given on-the-ground assistance in managing their woodland properties. This project will be continued and it is expected that critical area planting will be done on about 500 acres next year.

STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

Cassatt State Forest.....	462 acres
Harbison State Forest.....	2,202 acres
Manchester State Forest.....	28,830 acres
Sand Hills State Forest.....	92,000 acres

TOTAL123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally mis-used. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.



Unproductive scrub oak areas continue to be the number one problem on state forest lands.

The primary silvicultural objective continues to be the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops to reduce the competition so that pine will survive and grow. Approximately 5,000 acres of scrub oak land have been cleared and replanted to pine in the past ten years. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.

Research and experimental activities have increased during 1958-59. A forester was employed to coordinate research activities with other agencies (Clemson College and the Southeastern Forest Experiment Station) and to carry out demonstrations and experimental work as directed by the Commission. Some of the studies that have been started are:

1. Spacing studies for slash pine
2. Species adaptable to sandy soils
3. Comparison of growth on old fields versus clearings
4. Direct seeding of longleaf pine
5. Furrowing for better survival
6. Geographic seed source comparisons

Detailed reports of activities on each of the state forests follow:

CASSATT STATE FOREST

This area of 462 acres, lying about two-and-one-half miles north of Cassatt, South Carolina, was deeded to the S. C. State Commission of Forestry by J. R. West on May 28, 1935. A CCC Camp was located there and a fire tower and dwelling for a towerman erected. Also, some pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained boundary firebreaks and firebreaks around plantations and along public roads annually. Also, 58,000 slash pine seedlings were planted in the old fields some years ago.

In August and September of 1958, Sand Hills State Forest personnel cleared and plowed 175.0 acres of scrub oak land on the southeast side of the forest.

During February, 1959, this clearing was rented to three watermelon planters for a total of \$1,078.50. It is planned to plant this area to slash pine during the winter of 1959-60.

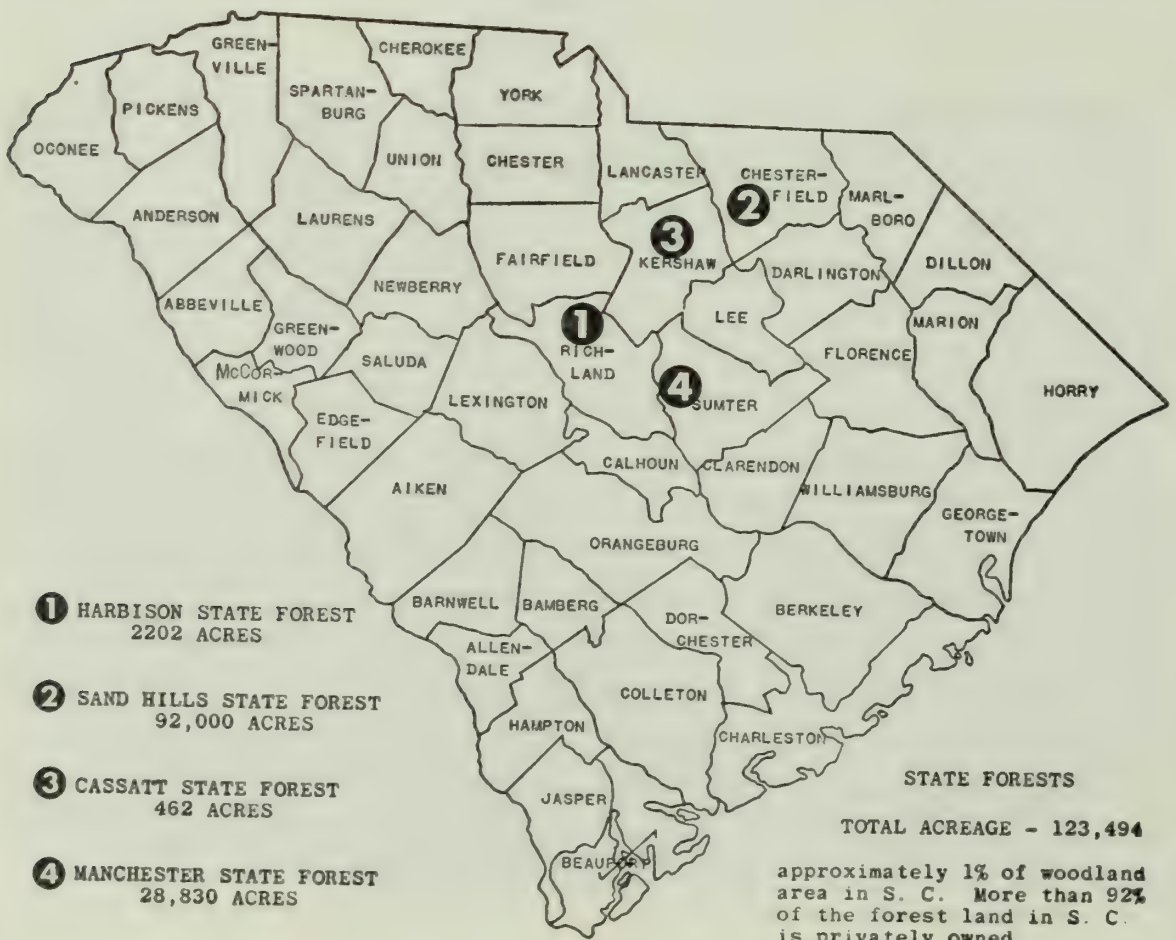
During March of 1959, Sand Hills State Forest personnel "pulled down" 128 acres of Stand 1, lying on the northwest side of the forest. It is planned to complete this clearing during 1959-60. The remaining scrub oak area will be planted to pine in 1960-61.

Some merchantable trees were sold in advance of the clearing operation. Receipts from these trees amounted to \$1,055.00, making total receipts, including watermelon rentals, \$2,133.50.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the fourteen years that the state has owned this property, receipts from the property have paid for the land purchase



price plus interest and all operating costs and have returned a substantial amount to the state treasury. This year's timber sales consisted of 190,425 board feet which sold for \$9,025.75; 152.5 cords of pulpwood which sold for \$992.23; one slab pile, \$50.00: making total receipts \$10,067.98.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state on June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat and to get all records of transfer completed. A survey has been completed for approximately half of the boundary lines during the last three years. Approximately one third of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak land and reclaiming it for pine production.

Fire Protection:

Only four fires occurred during the year, burning a total of 4.1 acres. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter unit fire control organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners in the area in the prevention, pre-suppression and suppression of forest fires. This fire record is one of the best ever posted for Manchester State Forest.

Fish and Wildlife:

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed.

Agriculture:

Thirty-three tenants rented 1,339 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, approximately 136 acres of newly cleared scrub oak land were rented for one season to watermelon growers.

Management Plan:

A management plan was developed from a cruise and inventory made on the ground. The information obtained from this field survey has now been compiled sufficiently so that a guide to cutting, planting, timber stand improvement, scrub oak clearing, etc., is now available and is being used to carry out necessary activities on the forest.

Tree Planting:

A total of 814,000 trees was planted on the forest during the year. These included 810,000 slash pine and 2,000 loblolly pine, and 2,000 red cedar. Practically all of the above plantings were made by machine in the brush-cut and cleared areas and only a few thousand were planted in the old fields.

Forest Products Sold and Other Receipts:

Sawtimber	522,713 board feet.....	\$19,394.13
Pulpwood & Posts	2,608 cords.....	19,570.27
Rentals & Leases & Misc.		6,561.75
Total Receipts		\$45,526.15

Silvicultural Practices:

The major silviculture activity continues to be the reclamation of scrub oak areas and establishing pine on these areas. In addition to the complete clearing and planting, some timber stand improvement work was carried out. Also thinnings and improvement cuts were made on a number of tracts.

Listed below are the clearings made since this work began:

<i>Year</i>	<i>Acres</i>
1949-50 -----	72
1950-51 -----	150
1951-52 -----	142
1952-53 -----	119
1953-54 -----	123
1954-55 -----	351
1955-56 -----	238
1956-57 -----	110
1957-58 -----	479
1958-59 -----	205
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Total -----	1,989

Three hundred forty-three acres of these clearings have not been planted. Part of these 343 acres were leased to watermelon growers this year.

Maintenance and Repair:

Many small maintenance jobs were completed on tenant houses and headquarters buildings. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair. The roof on the equipment shed was repaired during the year. A complete renovation job was done on the foreman's residence.

Some overhaul and repair of equipment was made. Personnel continued to work on equipment changes to increase the efficiency of the scrub oak clearing operation.

Forty-three miles of truck trails were machined and washes filled, a number of bridges repaired and ditches cleaned.

Eleven miles of telephone lines in the forest system were brushed and maintained.

Demonstrations and Meetings:

The Manchester State Forest area was used for a training school for all technical personnel at a training school held in May. Also, many of the new foresters were given individual training on the area. Many visitors came to the forest to observe the forestry work being accomplished.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until July 30, 1962. The State Forestry Commission is being paid \$3,074 per year for this lease.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease.

Before the area was acquired by the government, it was heavily cut-over, badly burned and generally abused. As a result, major activities for the present and for several years to come consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. Almost half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultural objective at the present.

Tree Planting:

All planting was done by machine except for some experimental longleaf planting. All plantings were made in clearings. All the old fields on this forest, except those being farmed, have now been planted to trees. A total of 424,000 slash pine, 85,500 longleaf pine, and 3,600 loblolly pine was planted. A total of 14,047-352 seedlings has been planted on the property since 1935. Approximately two-thirds of these plantings were successful.

Forest Products Sold and Other Receipts:

Sawtimber	334,478 board feet	\$17,178.17
Pulpwood & Posts	2,190.5 cords	18,376.79
Agricultural Rentals		2,959.75
Total		\$38,514.71

Fire Protection

During the year 20 fires burned 49.2 acres. This is the best record since the forest was established in 1939. The fire plan

which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield unit fire control organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

Recreation :

The Sugar Loaf Mountain Recreation area for white people continued to receive heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and latrines provided. The 15 Boy Scout troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing, but no swimming is allowed.

The State Park Division continued improvement work on Campbell's Lake Negro State Park. This area received heavy use during the year.

Fish and Wildlife:

Hunting was allowed on the State Forest portion of the area during the year. Fishing is allowed without permits in Sexton's Pond and Sugar Loaf Mountain Lake. Campbell's Lake is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws. No hunting is allowed on the wildlife refuge area.

Agricultural Lands:

Fourteen tenants rent and farm 800 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers have been abandoned and have been planted to pine trees. More of this land will be returned to trees.

Silvicultural Practices:

A total of 367 acres of scrub oak was cleared with the brush cutter and/or cable, and plowed with the Athens plow.

Scrub Oak Clearing:

<i>Year</i>	<i>Acres</i>
1947-48	29
1948-49	290
1949-50	352
1950-51	307
1951-52	280
1952-53	535
1953-54	285
1954-55	380
1955-56	390
1956-57	200
1957-58	323
1958-59	367
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Total	3,738

Maintenance and Repair:

The Sugar Loaf Mountain Recreation area was maintained and all facilities in the area are in good condition. The general conditions of headquarters and director's residences is good; however, a number of the tenant houses are in need of considerable maintenance work.

Considerable maintenance was necessary on the motor vehicle equipment on the forest. Truck trails, bridges, etc., were maintained.

Boundary Surveying:

A Cadastral Engineer was sent by the Atlanta office of the U. S. Fish and Wildlife Service to continue work on boundary surveys for the forest; however, there are many more miles yet to be run to completely establish all boundaries. The surveying was done on an area where there was some dispute about the location of the Sand Hills State Forest lines. More work is planned for next fiscal year.

NURSERIES

SUMMARY

The rapid expansion of the Commission forest tree nursery program resulted in the creation of the Branch of Nurseries in September, 1958. The new branch is responsible for: all nursery and reforestation operations, including tree seed collection and purchase, seed extraction and storage, functional operation of the nurseries, seedling distribution, nursery research activities, survival records, obtaining and processing tree seedling orders, preparing budgets, and other fiscal procedures in obtaining payments for seedlings; also, coordination of the Commission's reforestation program with ASC, Soil Bank, and other agencies, including the Extension Service, Soil Conservation Districts, Vocational Agriculture, etc.; the future establishment, construction, development and operation of any new nurseries established in the state, and revision or development of additional new reforestation policies needed by the Commission.

Demand for seedlings remained at a high level, and even though a record number of seedlings was produced the Commission still could not satisfy all incoming orders. Interest in tree planting has stemmed not only as a result of the Conservation Reserve Program but also from scrub oak clearing in the sand hills section of the state, idle farm land due to industrial employment, higher timber returns, etc.

Seed gathering was a successful program this past season and sufficient cones were gathered and processed in the new seed extractory to supply at least one and one-half year's seed need for the three nurseries. This amount is calculated on an annual sustained production of 120 million seedlings.

Preliminary arrangements have been formulated in cooperation with Clemson College to conduct a nursery research program within the state. This will prove to be a very desirable program in the state in that local problems can be investigated on a local level. Most of the research findings in the past have been in other states and, therefore, not always applicable to South Carolina nurseries.

The Commission started taking applications for seedlings on March 1, 1958, and continued through July 31, 1958. By special agreement with the Budget and Control Board, payment for

seedling applications which amounted to under 13,000 trees was accepted and deposited in the state General Fund even though two fiscal years were involved. In other words, the payment received prior to July 1, 1958, was held in a special account and then deposited in the state General Fund so that credit could accrue for the 1958-59 fiscal year. After July 31, 1958, all of the seedling orders which had been received were compiled and compared to the tree seedling inventory of the three nurseries, which indicated the allocations that could be allowed to each seedling order. Basically, all orders up to 12,000 were filled as requested. Orders above 12,000 had to be reduced by about 40 per cent above the basic 12,000. Excellent cooperation was obtained from the various agricultural agencies of the state in taking seedling orders and forwarding them to the Commission for further action. The cost of seedlings remained at \$3 per thousand, f. o. b. nursery, or \$3.50 per thousand if the seedlings were sent to the landowner by express.

FOREST TREE NURSERIES ACTIVITIES

Distribution of Seedlings:

During this year, a grand total of 166,351,000 forest tree seedlings were distributed throughout the state. Of this total, 135,053,000 were produced in the three operating state nurseries plus seedlings custom grown for the state by TVA nurseries. The additional 31,298,000 were produced by either industry nurseries or brought into the state from outside sources.

Loblolly Pine	44,742,000
Slash Pine	89,101,000
Longleaf Pine	262,000
Arizona Cypress	286,000
Red Cedar	63,000
Shortleaf Pine	92,000
Yellow Poplar	24,000
White Pine	473,000
Spruce Pine	10,000
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Total	135,053,000

In addition to the above seedlings produced and distributed by Commission nurseries, the following is a list of trees brought into the state or produced in the state by other nurseries.

West Virginia Pulp & Paper Co., Summerville	11,092,000
Brought into state by other industries	9,489,000
Brought into state by A.E.C.	10,717,000
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Total	31,298,000

Even with the tremendous increase in seedling production, the supply was still not sufficient to meet demand. In fact only about 66% of the overall demand could be fulfilled. Likewise the number of tree seedling applications more than tripled from the average of 2,200 applications processed annually prior to 1957. Of course a great deal of this buildup was caused by the Soil Bank Conservation Reserve Program; however, the demand for seedlings for other than the Conservation Reserve planting has tripled since 1956. Analysis of the overall demand of 190 million seedlings indicated that 110 million were ordered for the Conservation Reserve Program and 80 million were other than the Conservation Reserve Program.

Generally, the Conservation Reserve Program was started by the enactment of The Conservation Reserve Program Act by Congress in 1956. Following the legislation, the Commission of Forestry entered into an agreement with the U. S. Forest Service to establish nurseries and provide seedlings demanded for planting under Conservation Reserve. Through 1958-59, a total of 466,222 acres were placed in the Conservation Reserve throughout the state, of which 349,386 acres were specified for tree planting. To meet this demand, approximately 350 million seedlings will be required. Through this year only 222 million seedlings were furnished the program, necessitating a carry-over demand for 128 million seedlings. It is anticipated that through 1960 some 467 million seedlings will be needed for Conservation Reserve planting.

With the investment that the federal government has in South Carolina nurseries, the Commission is committed to supply the program with 110 million seedlings annually until the needed trees are supplied. At present it appears that the total number of seedlings needed will not be fully supplied until about 1962. This estimate is based on the assumption that the Soil Bank Conservation Reserve Program will not be extended beyond 1960, or that some new program will not be instigated.

Tables No. 10 and No. 11 in the Appendix show seedlings distributed by counties and class of ownership. Table No. 12 shows total acreage planted by counties and acres in need of planting. The following table records the number of seedlings planted in South Carolina by years, including out-of-state seedlings.

<i>Year</i>	Total Distributed (<i>State Nurseries</i>)	Total Distributed (<i>Inc. other sources</i>)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255
1946-47	1,962,600	1,962,600
1947-48	11,356,990	11,356,990
1948-49	30,338,775	30,338,775
1949-50	29,501,955	29,501,955
1950-51	20,615,315	20,615,315
1951-52	16,619,000	16,619,000
1952-53	22,035,850	32,246,298
1953-54	36,210,100	42,852,314
1954-55	35,373,025	45,182,255
1955-56	34,413,550	42,931,755
1956-57	55,753,600	69,658,736
1957-58	60,846,200	93,369,084
1958-59	123,985,000	166,351,000
TOTAL		744,258,250

Forest Tree Seed Collection:

A good crop of cones on slash, loblolly and longleaf pine existed throughout the state during the year; therefore, collection was pushed to the maximum. Experience has proven that more and better seed can be obtained during good cone crop years. Overall, the collection period extended from the last week of August until the last week of October. During this period 23,518 bushels of pine cones, 187 pounds of red cedar berries and 2.5 bushels of yellow poplar seeds were gathered. In obtaining tree seed throughout the state, the Commission of Forestry through its field offices locates private collectors in good seed producing areas to obtain the quotas which are set. Of the pine gathered, 13,092.5 bushels were slash pine, 8,702.5 bushels of loblolly pine and 1,274 bushels of longleaf pine.

This was the second year of operation of the new seed extractory located at the Tilghman Nursery. Excellent seed has been produced through this extractory with higher quantities and better quality seed being obtained per bushel of cones. From the 23,518 bushels of pine cones, 23,482 pounds of clean pine seed were obtained. Prior to the construction of the seed extractory,



Under the supervision of the Commission's field offices, private collectors assist in the collection of pine cones to supply seed for the annual crop of forest tree seedlings for planting on idle land in South Carolina.

pine cones were processed in air curing sheds which were located at the old Sumter nursery. The average amount of seed obtained per bushel of cones in these air curing sheds amounted to approximately 0.6 pounds. In the new extractory over the past two-year period of operation, more than 1.0 pounds were obtained per bushel in both loblolly and slash pine. The average cost of the seed to the state since the operation of the above mentioned extractory has been \$1.60 versus \$3.00 to \$5.00 per pound if the seed were purchased from commercial dealers.

Each year, usually during July, sample plots are taken in each county of the state from which a cone crop forecast report is compiled. The report this year indicated that the crop for 1959-60 would be only 41% as good as the 1958-59 crop and, therefore, is rated as "poor". Conversely the 1958-59 crop was rated "very good" and, therefore, the reason for processing the 23,518 bushels of pine cones during a good seed year.

Seedling Survival Examinations:

When forest tree seedlings are outplanted one year by the landowners of the state, approximately 10% of the seedlings planted in each county are sampled to determine the overall state survival rate. It is through these examinations that the Forestry Commission can ascertain in what direction more education in tree planting should be directed to eliminate any plantation failures on the part of the landowners. As a matter of information, this past year the overall state seedling survival rate is estimated 67% versus an overall state average for several previous years of 55%. Part of this higher survival percentage can be attributed to the method employed presently in packaging and distributing seedlings from the state nurseries. The seedlings are packaged so that "heeling in" is not necessary nor desirous at the planting site. This procedure has not only been a saving to the landowner by eliminating rehandling of seedlings, but has also been an advantage to the seedlings themselves in that the plants were not disturbed through an additional handling.

Research:

Preliminary research studies have been effectively started in cooperation with Clemson College covering various problems concerning nurseries and the production of nursery stock. This cooperation has been badly needed over the past 27 years in that the only research previously being done was in other states and the

findings were not always applicable to the nurseries within the state. Cooperative studies have begun on seedling bed densities, use of iron oxalate on both the nursery and outplanted seedlings, preliminary arrangements for annual soil testing through the facilities of Clemson College, etc. It is anticipated that after sufficient personnel are available to the research department at Clemson, many of the other projects which should be investigated will be taken under advisement by the college.

Anticipated 1959-60 Seedling Production:

From preliminary inventories of all four nurseries, it is presently estimated that approximately 155 million seedlings will be available for distribution during the 1959-60 season. In addition, the Commission has a promise of some 20 million seedlings from TVA nurseries which were custom grown for South Carolina from South Carolina seed source. Species include loblolly, slash, longleaf, shortleaf and white pines, yellow poplar, Arizona Cypress and bald cypress. It appears that even with this largest of all productions ever produced by South Carolina the demand for seedlings will still not be met during next year's distribution.

NURSERIES

Horace L. Tilghman Forest Tree Nursery:

This was the twelfth year of tree seedling production at this nursery since acquisition of the 104.5 acres of nursery land in 1946. Approximately 80 acres of the above total are available for seedling production with the remaining area being used for roads, buildings, supply storage, and seed extractory. The seed bed area allows for an annual production of 38-40 million trees on a 1-1 rotation. It was necessary to reduce production at this nursery during the 1958-59 fiscal year to a total of 33,683,000 seedlings. This was primarily due to poor soil conditions. The nursery was so drastically overproduced during the previous two years that it would have been foolhardy to try to approximate normal annual production. Since this nursery was the only one available in the state prior to 1956, the overproduction and the temporary soil depletion was warranted.

The general soils type is predominately a red bay sand loam which was derived from unconsolidated sands and sandy clays of the coastal plains. Being a coarse sand, the soil is subject to heavy leaching when the soil organic matter is allowed to be-

come depleted; therefore, it is imperative that the seedling crops be produced on a 1-1 rotation to allow for intensive soil building practices during alternate years.

During the year, a total of 33,683,000 seedlings was produced and distributed, including 2 million slash pine seedlings purchased for landowners throughout the state from the Georgia Forestry Commission. Since the nursery was established, 370,-584,000 seedlings have been produced and distributed.

Considerable difficulty has been experienced with the outmoded irrigation system. Basically, it is an overhead system which was partially salvaged from CCC days. Delivery of water is not sufficient or well distributed. As a result, considerable damage was sustained to seedbeds during a severe windstorm. Sufficient water could not be delivered to wet down the straw mulch to prevent it from blowing from the beds and thereby damaging about 2 million trees. Also repair costs to the system annually have been excessive, and therefore warrant the installation of an up-to-date irrigation system.

Piedmont Forest Tree Nursery:

Land for development of the Piedmont Nursery was acquired in July, 1956, in the northwestern section of Pickens county. A total of 81.5 acres was purchased of which approximately 53 acres are available for tree seedling production. The remain-



Dependable labor and good training is a key to the success of the program of raising and shipping 135 million trees. Here, workers count and grade seedlings in preparation for shipping to individual landowners.

ing 28.5 acres constitute roads, stream, buildings and uncultivated land. The soil types range from sandy loam to loamy sand and are principally known as the Congaree and Wickham types as defined by the Soil Conservation Service.

During the past year, a total of 25,971,000 seedlings was produced at the nursery and an additional 11,068,000 were handled which were produced for the state by TVA nurseries in Clinton, Tennessee. Since this is the second year of production at the Piedmont Nursery, a grand total of 44,139,000 seedlings have been produced. At this time all of the improvements have been completed together with most of the necessary drainage and land leveling activities.

Since the soil types in the nursery are of higher quality than in any of the other nurseries, it will be possible to plant part of the area on a 2-1 rotation without seriously depleting soil fertility. During the two years of operation considerable cost has been borne in weeding the nursery beds. As is true in all newly established nurseries, weeds are a great problem for several years. In fact, the costs can exceed \$400 per acre per season. This problem could be rectified by soil fumigation. Fumigation would destroy weed seed for at least a three-year period at a cost of about \$350 per acre.

Coastal Forest Tree Nursery:

In July, 1957, the state acquired, under a ten-year lease agreement, 100 acres of nursery land located approximately two miles north of St. George, South Carolina, along highway 15. Of the 100 acres, approximately 73 acres are available for tree seedling production with the remaining acreage being used for buildings, roads and uncultivable land. Included in the lease agreement is a provision for a right-of-way to a water supply reservoir for irrigation purposes. The nursery improvements, equipment and construction were totally financed through the Soil Bank Conservation Reserve Program so that seedling production could be increased in South Carolina to more nearly meet the demand of the Conservation Reserve Program. This was the first year for tree seedling production with a grand total of 64,331,000 seedlings being produced and distributed.

All of the soil is a Norfolk sand loam medium phase which indicates that it will lend itself well to future seedling production and soil building practices. Having a sandy clay subsoil approxi-

mately 12 to 14 inches below the top soil allows for efficient fertilizer absorption together with limited irrigation. As soon as the organic content of the top soil is raised to a desirable level, parts of this nursery will lend themselves to 2-1 cropping. Overall annual sustained production should average approximately 45 million trees even though the nursery was overproduced during this first year. It has been found through experience that in first year cropping most nurseries can be overproduced without serious depletion of the soils.

Since the area is adjacent to a savannah which is densely populated with various species of oaks, it has been found that *Cronartium fusiforme* rust will be a serious threat to each crop and, therefore, will require special attention through applications of fungicide sprays during the active season of spores.

A major land leveling process was necessary on approximately 12.4 acres which required considerable dirt movement and a drainage system. With these additional 12.4 acres, however, the total plantable area was brought up to the above 73 acres which are available for seedling production.

Ridge Forest Tree Nursery:

During September, 1958, a fourth nursery site was acquired near Trenton, South Carolina, under a ten-year lease agreement with a provision that annual rental payments shall accrue to the final purchase price. Purchase can be effected during any period of the ten-year lease or immediately thereafter. Total area includes 110 acres of which 10 acres are used as a reservoir area. Of the remaining, approximately 75 acres are available for tree seedling production. The two parcels of land (100 acres and 10 acres) are separated by approximately a one-fourth mile right-of-way which is used for the water main from the reservoir to the nursery site proper. It was necessary to make this division in that water for the reservoir is supplied by a series of springs and contains approximately 67 acre feet of storage water.

The soil types include both the medium Norfolk fine sandy loam and the deep phase Norfolk fine sandy loam. The small portion that contains the deep phase Norfolk fine sandy loam will require intensive soil management for several years so that the organic content may be built to a point where leaching is not a serious problem.



An adequate supply of water is mandatory in the successful operation of a nursery. The pipe line shown, is to supply water to the Ridge Nursery from a lake about a mile away.

During the spring of 1959, the nursery was seeded and will have its first crop of seedlings available for distribution during the 1959-60 season. Production the first year is planned for about 50 million trees, which should raise total production from the four nurseries to about 155 million seedlings.

It is planned that all permanent improvements and nursery layout will be completed during the 1959-60 fiscal year. All of these improvements, equipment, etc., were financed through the Conservation Reserve Program so that total allocations to the Program from state nurseries could be raised from the present 75 million seedlings to about 110 million seedlings.

INFORMATION AND EDUCATION

INTRODUCTION

With every passing year the 12 million acres of forest land in South Carolina are becoming more important to the progress of the economy and the well-being of the people of our state. With this ever-increasing importance there is growing need for stepped-up activities in forest conservation and development, and for solutions to the problems of how to make each acre of forest land produce the maximum amount of wood fiber, as well as provide the necessary recreation facilities to our ever-increasing population. The part that our woodlands play in the supply of good and plentiful water for both home and industrial use is also becoming increasingly important. An understanding of the problems in the field of forest conservation is necessary on the part of every man, woman, and child in South Carolina. The benefits that each receives and the part that each can play constitutes a major concern of the State Commission of Forestry's program.

A good, sound forest conservation program involves not only trees but people as well. The success of the Commission's forest conservation activities depends upon an adequately informed public, and involves many people and many different activities.

The Commission functions on the premise that every member of its organization has a part in the educational program. Personnel of the Commission reach out in the educational program through press releases, photographs, pamphlets, talks, field demonstrations, films, radio and television programs. Through these media South Carolinians are made aware of the seriousness of the problems that face our state in the maintenance of our state parks that serve as playgrounds for millions every year, and the conservation of our natural resources that make possible a livelihood for many and comforts and necessities for all.

The Commission's educational program is geared to point out to every South Carolinian that he has a stake and a responsibility not only in the present but also in the future of the state parks and forests of South Carolina. It is a fact that the forests of South Carolina support the state's second largest industry, second only to textiles. It is also a fact, though, that the state's woodlands are producing at less than half of their potential

capacity. When the landowners and people of our state realize the potential value of woodland production and apply practical methods of conservation and wise use, the amount of timber available for commercial use can be more than doubled.

The problems of forest conservation and stepped-up production of forest products can be solved through a three-fold program. The first step is the prevention of wild woods fires. The second is an improvement of forest cutting and management practices. And the third is restocking idle agricultural land as well as understocked and idle woodland.

The aim of the Commission's information and education program is to get forestry and state park information to the people of South Carolina so that the problems confronting us may be solved. Information and education efforts are keyed to the following points:

1. Forest Fire Protection

4,500 illegal woods fires occur annually in South Carolina, with 99 per cent being caused by people.

2. Unwise cutting practices mean low production and inferior forest products.

3. Trees should be planted on some two and one-quarter million acres of idle or unproductive land.

4. Improvement of the quality of many existing stands of timber throughout the state by the removal of inferior species as well as lowgrade and poor-quality trees.

5. Full appreciation should be developed in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of South Carolina.

FOREST FIRE PREVENTION

A realistic localized approach to teaching forest fire prevention is used by all personnel of the State Commission of Forestry. Particular emphasis is given the damage caused by the average slow-burning quiet fire that so many South Carolinians are accustomed to seeing, with the spotlight on the loss of little trees as these fires sweep through our woodlands. Attention is drawn to the protection of little trees as the key to adequate stocking of our woodlands in the future. A serious effort was made to reach with this information every man, woman, and child possible within the state of South Carolina through personal contacts; posters and publications available through the

national Cooperative Forest Fire Prevention Campaign; and illustrated talks and motion picture showings in community meetings, in private homes, civic club meetings, and school rooms. Wall and pocket calendars, roadside signs and exhibits, and other materials produced by the Commission, broadened the means of bringing the conservation message to each and every citizen in the state. Considerable credit is due also to other



Seed + Fire Protection = Future Forests

HELP NATURE

KEEP SOUTH CAROLINA GREEN AND GROWING

The vital part that natural seeding plays in good forest management practice was highlighted in the Commission's 1959 wall calendar.

interested agencies, both private and governmental, for their cooperation in assisting the program of education of the Commission of Forestry.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

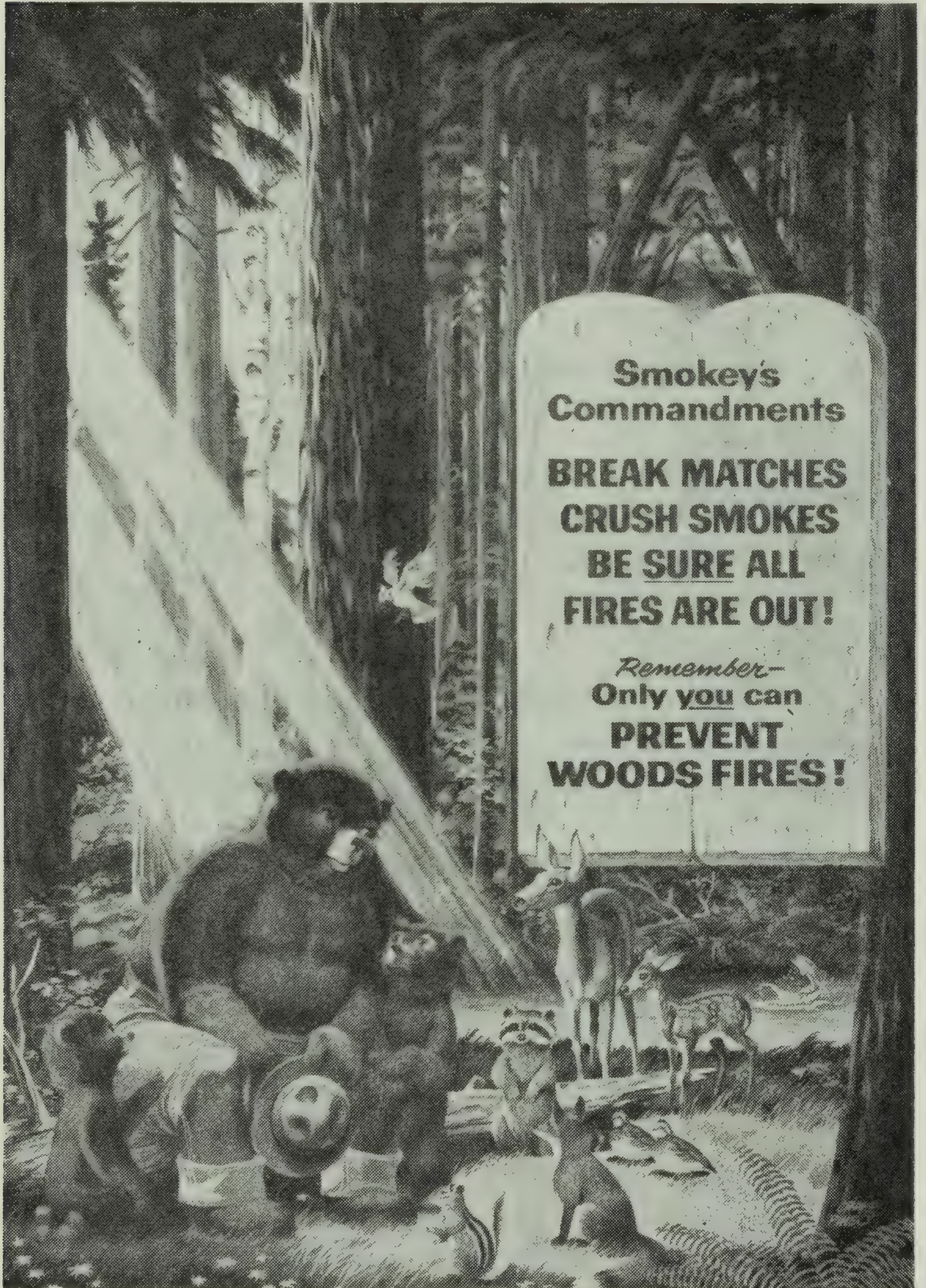
The message of the Cooperative Forest Fire Prevention Campaign, with the full support of the Commission of Forestry, reached in one way or another nearly every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina was supported by a wide variety of materials including posters, booklets, bookmarks, newspaper ads, radio platters, TV spots, films, and other materials to bring forest fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flashlights, wallets and moccasins, T-shirts, scarfs, fishing tackle and archery sets, cigarette snuffers and ashtrays, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, banks, coloring books, comic books, story books, bubble bath, buttons, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls, and other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Feeling the need for a more local slant than some of the published materials in the national campaign can provide, the states and the U. S. Forest Service in the Southern region are now cooperating in the production of additional materials with a Southern flavor. State Forester Flory is a member of the committee guiding the development of this program. The first year's operation of the Southern program saw approved a new poster, recorded radio spots, a series of TV spots, films, and news ads,

all of which are currently being distributed. The Southern materials will not replace, but will supplement the national materials and should help intensify and strengthen forest fire prevention efforts in South Carolina.



Smokey, the symbol of forest fire protection in the United States, reminds us all, in many different ways, that keeping our woodlands green and growing is everybody's business.

The idea of a Southern CFFP program originated about 3 years ago, in 1956, about the time of the Southern Forest Fire Prevention Conference held at New Orleans. It was suggested as an organized, coordinated follow-up of the conference to help solve the terrific problem of high fire occurrence in the South. Its conception was in no way a reflection on the national CFFP program—the Smokey Bear program. Rather, it was a recognition that the national program could do many things very effectively, but that it could not effectively attack and solve some of the serious fire problems peculiar to the South.

The Southern program does not weaken or compete with the national Smokey Bear program, but will supplement, reinforce, and strengthen the national program.

A number of people representing states, the U. S. Forest Service, and the advertising industry explored the possibilities of establishing a southern program but no action was forthcoming in 1956 and 1957. In 1958, however, the various suggestions began to crystallize, questions were resolved, and the wheels began to turn. All southern states (except for two, Arkansas and Oklahoma which were unable this year to support the program financially) agreed on objectives and procedures, and established a Southern CFFP Committee to develop the program.

The organization of the Southern group is closely patterned after the very successful national CFFP setup.

Bill Huber, of the Washington office, U. S. Forest Service, serves as Director of the Southern program as well as Director of the national program. This assures coordination of both programs for maximum effect.

The Southern CFFP committee is composed of 3 State Foresters—Coulter of Florida serving as Chairman, Flory of South Carolina, and Marlin of Mississippi. Marlin is also a member of the national CFFP Committee, which provides another good tie into the national program. Also on the southern committee are Jim Diehl of the Washington office of the U. S. Forest Service (who is also a member of the national committee) and George James of the Regional Office in Atlanta.

Russ Eller, an outstanding figure in the advertising industry, serves as coordinator of both the southern and national programs for the Advertising Council.

One of the leading advertising firms in the South, Liller,

Neal, Battle and Lindsey of Atlanta, was selected to serve as the volunteer task force agency to provide professional advice and services without charge, in developing and carrying out this public service program. The advertising agency is paid out of the Southern CFFP budget for out-of-pocket expenses, but the agency will contribute even more in the way of time, talent, services, and facilities.

The first year's budget for the Southern CFFP program was \$12,000, with 40% contributed by the U. S. Forest Service and 60% contributed from state CM-2 funds. The share of the various state contributions is to be figured on the basis of $\frac{1}{4}$ of 1% of its CM-2 allotment for a given year.

The planning and production of materials for the Southern CFFP program began late in 1958, and the advertising agency did a fine job, working within limitations of time, money, and knowledge of the problem.

Already produced, after being approved by the Southern Committee, are a series of radio platter announcements and newspaper advertisements. Production was also completed on a 1-minute, a 20-second, and two 10-second films for use on television. Additional films for television use, a poster on malicious burning, new newspaper ads and other materials are planned for production soon.

Although it is difficult, if not impossible, to produce materials that will satisfy every state in every detail, the Southern CFFP Committee and the advertising agency did an excellent job in launching this program.

In planning the Southern CFFP program it was recognized that the national Smokey Bear program materials have a particularly strong appeal to children, and can do an excellent job of "conditioning" the minds of youngsters and establishing in their minds lasting ideas about forest fire prevention and forest conservation. This sort of thing is like catechism or getting religion at an early age—the influence and effects remain throughout a lifetime. Therefore, the national Smokey Bear materials will continue to be used in the South.

The Southern program, however, will aim mainly at an adult audience. The character of Smokey Bear will be used when it can be appropriately and effectively used. Other characters may be created and used either with or without Smokey as the oc-

casion demands—and in still other cases, straight messages or other devices will be used. The messages may be built around the detrimental economic effects of forest fires in the South. This approach is based on the premise that the most immediate help in solving southern forest fire problems will come from an informed adult population. And it is recognized that one of the best ways to reach most adults is through the pocketbook.

Some of the initial efforts will be directed to a news-type approach to try to make people of the southern states aware of the magnitude of the forest fire problem in this region, and how forest fire occurrence and loss is affecting the economy of the South—and is also affecting each man, woman and child living in the region.

Some of the effort will be aimed to develop a general climate of opinion on the matter of forest fires.

Some of the effort will be directed at the most important fire causes in the region. Most of the effort will highlight the economic angle—the dollar angle involved.

In addition to emphasizing economic factors, wherever possible the southern program material will include various points about conservation of natural resources, wildlife, etc. It will also call attention to the golden rule of not burning the other fellow's property and will point out the right way to burn when burning is necessary and justified.

It was felt that an effective way of expressing to every citizen the loss resulting from southern forest and woods fires was to use the slogan, "Every time a forest fire strikes, *you* get burned." This statement was used in most of the material prepared this year.

The Southern CFFP Committee and the advertising agency are considering some very fine suggestions for future materials. One of the suggestions from several states was that a poster be prepared aimed at deliberate woods burning. This poster has been approved. It utilizes a character called "Mr. Burnit" who will also be the chief character in the second series of animated, cartoon-type 1-minute, 20-second, and 10-second films for TV use. This series of television films departs somewhat from the economic angle and plainly attempts to make a villian out of the malicious woods burner. There is no pulling of punches here.

He's simply an undesirable character who must be stopped by responsible citizens.

An explanation of why malicious woods burning has been featured in some of the new southern materials might be in order. The question of describing the culprit in the Southern woods is one that has been given much attention over the years. The term "deliberate burner" is often used. The Southern CFFP Committee and the advertising agency recognized that malicious burners—the fellows with malice against somebody else—probably are only a small part of the troublesome group. But they felt that the term "deliberate burner" was not strong enough—particularly since it is recognized that some deliberate burning such as prescribed burning is condoned or even recommended. While all deliberate woods burners may not be malicious by one definition, they often legally become so by their very irresponsibility. Many forest fire laws on the books use the terms malicious willful, etc. As a result, it was felt that there may be big benefits in including all deliberate burning in the malicious category in this initial approach to the problem. This, of course, is merely a matter of approach and terminology; nevertheless, *what* we say and *how* we say it is extremely important.

The Southern CFFP program is a *new* program. It has only been in gear for a few months. It may take a little time to understand its operation, its limitations, and its potentials. But here, for most states, for less than the cost of a single firefighter we have the opportunity of obtaining some top-quality forest fire prevention material designed for the South.

The Southern CFFP program is not a cure-all for the forest fire problem in the South. But it can be mighty potent and effective medicine, particularly as it is coordinated and supported by the national Smokey Bear program, and the special fire prevention programs at the state, county, and local levels.

FOREST FIRE RECORD

The branch of Information and Education continued to keep the press and public informed accurately as to the forest fire situation throughout the state, stressing the need for particular care during the critical dry and windy months of January, February, March, and April. This information is made available by articles and photographs for newspapers, and motion picture footage for television use, for example.

The continuing occurrence of intentionally set fires during the year pointed up the urgent need for an intensified program of child and adult education as well as the need for a strengthened law enforcement program.

SCHOOL PROGRAMS

School children throughout the state receive a major share of the time and efforts of foresters, rangers, and wardens of the Commission of Forestry. Some 779 programs were held in the fifth and sixth grades where either schoolyard demonstrations of fire control equipment and suppression techniques or color slides were shown to help bring the conservation story to the classroom. In these two grades alone, some 39,072 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slide programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations mentioned above, all third grade children throughout the state (numbering more than 70,000) received a copy of the booklet "Smokey Bear's Story of the Forest," with a color sheet listing what everybody should remember about "Outdoor Good Manners," including forest fire prevention.

Some 530 movie showings were made in school auditoriums, bringing forest conservation information to 71,896 students of all grade levels.

The Commission's school programs are designed to build a stronger and more appreciative community of the future by giving basic instruction and information to our children as to the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

FORESTRY DEMONSTRATIONS

During the year 3,656 persons attended 111 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation control of undesirable species and timber stand improvement.

Demonstrations are effective ways to getting forestry information to people and can do much to help make it possible to grow an appreciably greater amount of valuable timber on the 12 million acres of forest land in the state.

In most case demonstrations were held in cooperation with foresters of various companies, the Clemson Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies and organizations cooperated to make the 1958 Conservation Week a real success. South Carolina law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, a special folder was printed and distributed to schools and other interested groups to assist them in planning programs and observances during Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs include tree planting exercises.

A total of 973 Conservation Week and Arbor Day programs were reported, with 142,190 persons attending.

FIRE PREVENTION ROADSIDE SIGNS

Newly designed roadside signs were erected wherever older signs needed replacement. The new designed signs continued to carry the three messages in the following sequence: **USE YOUR ASH TRAY—HELP PREVENT WOODS FIRES—PROTECT LITTLE TREES, KEEP S. C. GREEN.** The fire prevention roadside signs appear on main highways throughout the state. The Commission hopes to be able to intensify this project from year to year by providing additional signs along intermediate highways where thousands of motorists will see these forest fire prevention reminders as they travel the highways.

MOTION PICTURES

Motion pictures continued to be a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is used for forestry motion picture showings in every county of the state.



Newly designed roadside signs replace old ones in the Commission's effort to keep the traveling public aware of the danger of fire.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 81,756 people saw motion pictures on forestry at 735 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

Since 1930, when forestry was added as a course of study in vocational agriculture classes in South Carolina, the Vocational Agriculture staff of the State Department of Education and the State Commission of Forestry have worked very closely in emphasizing the importance of the conservation of our forest resources to the future farmers of the state.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many students have home forestry projects. They plow firebreaks, plant seedlings, thin crowded stands, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes. Commission Foresters and Rangers are available to assist vocational agriculture classes with talks, demonstrations, and field work on forestry, and also provide filmstrips, motion picture films, booklets, posters, and other aids for teaching forestry.

Three workshops were held for vocational agriculture teachers during the year, two for white teachers, and one for Negro teachers. Here teachers received instruction in forestry practices which could be used in their classroom and field projects.

The Forestry Commission sponsors an annual FFA and NFA Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1958-59 school year awards were presented to the winning FFA and NFA Chapters in each Vocational Agriculture District as follows:

DISTRICT I—FFA

- (1) Pendleton FFA Chapter
- (2) McCormick FFA Chapter

DISTRICT II—FFA

- (1) Mt. Zion FFA Chapter
- (2) Jonesville FFA Chapter

DISTRICT III—FFA

- (1) Dentsville FFA Chapter
- (2) Gilbert FFA Chapter

DISTRICT IV—FFA

- (1) Ridgeland FFA Chapter
- (2) Allendale-Fairfax FFA Chapter

DISTRICT V—FFA

- (1) St. Johns FFA Chapter
- (2) Hannah FFA Chapter

DISTRICT VI—FFA

- (1) Conway FFA Chapter
- (2) St. Stephen FFA Chapter

DISTRICT I—NFA

- (1) Geer-Gant NFA Chapter
- (2) Bryson NFA Chapter

DISTRICT II—NFA

- (1) M. M. Bethune NFA Chapter
- (2) Florence NFA Chapter

DISTRICT III—NFA

- (1) Edgefield NFA Chapter
- (2) Riverside NFA Chapter

DISTRICT IV—NFA

- (1) St. Helena NFA Chapter
- (2) Butler NFA Chapter

RESOURCE-USE EDUCATION

To stimulate the teaching of conservation at various grade levels in the schools of the state three workshops were held for teachers of vocational agriculture and two workshops were held for elementary and high school teachers during the year. Commission personnel provided instruction in forestry and the use of state park facilities in resource-use education workshops held at the University of South Carolina and at Clemson College.

In addition to the workshops mentioned above, forestry and state park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation. Particular emphasis was placed on state park trails as effective "outdoor classrooms" for studying the many

interrelated factors that go to make a good conservation education program.

The resource-use education movement has stimulated interest in the out-of-doors as an aid to effective teaching, and provides an excellent opportunity for teaching conservation concepts.

SMALL WOODLAND OWNERS CONFERENCE

South Carolina was one of the first states in the South to hold a Small Woodland Owners Conference to obtain opinions and suggestions on how to raise the level of management and improve the productivity of the small woodland ownerships in the state.

Over 90 percent of the forest land in the state is in private ownership and 8 out of every 10 acres of private forest are in the small ownership class. These small tracts, with an average woodland area of 74 acres, are held by 116,000 individual owners.

An evaluation of forest practices on private lands indicates that a high proportion of small woodlots are producing at only a fraction of their potential capacity. Many areas need planting to restore them to a reasonable level of productivity. Other areas are being held in an understocked condition because of damage by repeated or severe fires. Timber stands on many thousands of acres are choked with cull trees or worthless species which occupy the available growing space.

Nearly 200 persons attended South Carolina's Small Woodland Owners Conference held September 17, 1958 at the Wade Hampton Hotel in Columbia.

After an invocation by Rev. A. W. Martin, R. M. Cooper, Director of the State Development Board, called the meeting to order and served as chairman. Telegrams, expressing interest in the small woodland situation, were received from both Governor Timmerman and Lt. Governor Hollings. A keynote speaker and four panel members presented the situation relative to South Carolina's small woodland owners. They were followed by 23 speakers from the floor.

The Honorable William Jennings Bryan Dorn, Congressman of the Third District of South Carolina, made the keynote address. Mr. Dorn gave a brief historical sketch of forestry development in the state and praised the state and United States Forest Service for their fire prevention and control efforts.

He pointed out that forestry is second only to the textile industry in the state's economy today and that the 116,000 small

woodland owners must improve the condition of their eight million acres. He said that unless prompt action is taken to increase production on small woodlands, the Government might some day step into the management of our small woodlands. A positive approach of educating both the landowners and their Congressmen on the need for improving the forests is needed. He advocated larger appropriations for forest research, thinning of U. S. Government forests, state forestry operations, and forestry education in the public schools.

Panel members—one banker and three tree farmers—woodland owners—further developed the problems of the small woodland owner as they saw them and offered their impressions as to needs. The most frequently mentioned need was education of the landowner through demonstration areas, newspaper publicity, local committees, and actual assistance by farm foresters. Long term financing, improved fire control, genetics research and long range farm development plans were each mentioned as part of the whole picture of small woodland owner needs.

The speakers who volunteered from the floor constituted a good cross section of those concerned with small ownerships. Six small woodland owners, members of the state legislative Forestry Study Committee, representatives of Soil Conservation Districts, the Grange, State Bankers Association, the Chamber of Commerce, the Farm Bureau, Federal Land Bank, Vocational Agriculture, and forest industry were heard from. These speakers put education at the head of the list, followed by the need for increased



Congressman Dorn of the Third District of South Carolina made the keynote address at the state's Small Woodland Owner Conference.

technical assistance, easier loan money, more and improved research and other miscellaneous suggestions.

One speaker from the floor might be singled out for special comment. Mr. Jack Carroll, chairman of a subcommittee of the Forestry Study Committee, reported briefly on three recent meetings held in various parts of the state on the small woodland owner subject. He listed over 30 suggestions that had been made in these local meetings. Nearly half dealt with the need for educating the landowner through management demonstrations, fire prevention messages, and prescribed burning education.

To provide perspective, the following tabulation indicates the number of speakers, both from the panel and from the floor, who made significant mention of these general needs:

Education	22
Technical Assistance	9
Easier loan money	7
Research	3

Many speakers said that most landowners do not know the potential value they have in their woods. More basic even than technical or financial assistance, is the need to show the owner that he has a valuable asset in his woodlot, and that proper management of the woodlot will increase his income. General informational programs were stressed, including demonstration plots in each county stressing long term benefits, show-me trips to well manage woodlots, magazine and newspaper informational items, television and radio programs on forestry, and forestry pamphlet distribution. All these media were suggested as means to arouse owners' interest.

The personal contact approach by farm foresters, county agents and the SCS technicians was mentioned several times. These groups, already functioning in the local community, should take the initiative in urging the farmer to consider his trees as an integral part of the farm crop. Chambers of Commerce, youth groups such as 4-H, banks, and especially organized county committees were specifically suggested as groups that could carry the basic forestry message to the owner.

Continued and increased fire prevention work, together with education on prescribed burning techniques, were suggested as aids to the needed educational campaign.

More farm foresters to service the technical needs of the woodland owner were recommended. Along this same line, it was suggested that the county agents and SCS technicians be trained to discuss woodland improvement with the owner and recommend trained foresters for advice on the technical forestry aspects of the problem. Farm plans prepared by SCS technicians should include planning, planting, marketing and harvesting of the tree crop.

Assistance in firebreak construction was suggested several times. Firebreaks constructed many years ago often need heavier maintenance equipment than the normal farm tractors and plows. Use of idle state and county fire control and highway equipment was suggested. More intensive fire control and prescribed burning by trained public forces were recommended as necessary aids to increase production on the small woodlands.

One small woodland owner pointed out that clear cutting of small diameter pulpwood stands for ready cash was South Carolina's worst problem. He recommended some method of making loans on standing timber to tide the owner over immediate financial needs. In this way, stands can be grown through to sawtimber size. A banker and a representative of the Federal Land Bank both remarked on the willingness of their organizations to help the owner through cash loans and loan of planting machines. Long term loans to small woodland owners both for improving the present stand and for financing the purchase of additional private land, were recommended.

At the local meetings conducted by the Forestry Study Committee, several recommendations were made relative to hardwood marketing and eradication. Market research on increased utilization of hardwoods now considered worthless was requested. More research was asked on eradication of both brush and hardwood prior to planting—also, better cutting practices to prevent hardwoods from taking over after pine harvest. It was suggested that better site index information be developed to help determine species and areas best suited for planting. Research on insect and disease control was asked for as well as genetics research to develop faster growing, disease resistant seedlings.

Among the miscellaneous proposals suggested during the meeting were the following:

1. Improve the quality of seedlings to increase survival rate.

2. Change the customary log rule from Doyle to either Scribner or International to give the owner a better measure of timber sold.
3. Provide for Soil Conservation Districts to acquire title or long term lease of small woodlands so they can be improved and brought up to full production under proper management.
4. Institute a pulpwood price reporting service so that the farmer will know what the value of his tree crop is just as he does on his row crop.
5. Certify pulpwood buyers—to prevent them from taking unfair advantage of the woodland owner.
6. Educate pulpwood and timber buyers to the need of keeping the small woodlot productive. This will help both the growers and processors of wood products in the long run.
7. Assign responsibility for small woodland management to the local agency best qualified to assist the owner.
8. Establish a minimum diameter cutting limit of 7" to prevent removal of entire stand.
9. Tax equalization.

Industry spokesmen pointed out that much progress has been made in the past few years in the handling of small woodlands. This has been brought about by the various industry and agency educational and service programs. These recent improvements are not reflected in the final report on the Timber Resource Review.

The South Carolina small woodland owners conference was a well rounded affair. The small woodland owner, the industrial forester, the businessman and the interested cooperators all contributed to its success. Ideas were varied, and each added something to the overall picture. The obvious interest generated by this conference, as evidenced by the suggestions offered, may well be carried forward to the lasting benefit of the small woodland owner.

Ten statements on the small woodland owner subject were submitted either during or following the meeting. These statements were made a part of the official transcript of the meeting. Several of the written statements were summarized by speakers at the meeting. Five statements were not briefed during the meeting.

Education of the small woodland owner took first place in these suggestions. Forestry handbooks for use by the farmer

and a well organized series of local meetings to discuss forestry opportunities were among the ideas offered. Fire prevention education was stressed.

Coordination of efforts to help the woodland owner was requested. Soil Conservation Districts offer a "funnel arrangement" that might be used by many state and federal agencies in their approach to the farmer. The role that professional conservation societies may play in working with the landowners was brought out. A special point was made of the need for a strong State Forester's organization to provide forestry services.

Whatever program is devised should be geared to the needs of the landowner as the needs of the very small owner differ from those of the medium and large owners. It was suggested that a premium price might be offered for wood cut from properly managed stands. More efforts might be made by industry to provide a market for hardwoods, and industry might also try to smooth off the market fluctuations on both price and demand for wood products from the small woodland.

Copies of an 8-page report summarizing South Carolina's Small Woodland Owners Conference, or a 42-page transcript of the meeting are available from the State Commission of Forestry on request.

TALKS

Personnel of the State Commission of Forestry continued to give talks on all phases of forestry and state parks before many groups. The use of color slides with many of the talks helped make them much more interesting and more effective.

During the year a total of 341 talks were made by Commission personnel to 15,693 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. Foresters, Park Superintendents, Rangers, Wardens, Tractor Operators, Tower Operators, and other Commission personnel play an important part in the Commission's information and education program. As one example of the number of people reached, during the past year 19,028 persons visited Commission fire towers, where the work of detecting, reporting,

dispatching, fighting, and preventing fires was usually explained or demonstrated.

EXHIBITS

The Forestry Commission welcomes the opportunity to place exhibits in county fairs, garden clubs, churches, schools, and other organizations where educational forestry and state park displays are requested. Exhibits provide an excellent means of placing forestry and state park information before the people.

During the year the Commission cooperated with the Forestry Committee of the State Bankers Association and with International Paper Company, West Virginia Pulp and Paper Company, Champion Paper and Fiber Company, and Union Bag-Camp Paper Corporation in placing exhibits in interested banks throughout South Carolina.

Throughout South Carolina personnel of the Commission of Forestry placed exhibits at 97 locations which were seen by an estimated 1,474,602 citizens of the state.

The following is a record of where forestry and state park exhibits were displayed:

EXHIBITS AT STATE AND COUNTY FAIRS

Location of Exhibit—County Fair	Type of Exhibit	Estimated Attendance
Chesterfield	Common Diseases of South Carolina Trees.....	7,000
Camden	Miniature Smokey Cutout and Forest Scene.....	12,000
Lancaster	Smokey Cutout and Forest Scene.....	12,000
Bishopville	Forest Management Scene.....	9,000
Sumter	Smokey Bear Trial Scene.....	35,000
Sumter (N)	Cash In On a Good Deal.....	35,000
Florence	Smokey Bear Trial Scene.....	89,000
Loris	Mr. Tree Farmer.....	6,500
Darlington	Mr. Tree Farmer.....	7,000
Marion	Mr. Tree Farmer.....	11,000
Bennettsville	Talking Smokey and Panels.....	4,500
Hartsville	Fire Control Panel.....	4,000
Moncks Corner	Forest Management.....	5,000
Manning	Forest Management and Fire Prevention.....	3,000
Manning (N)	Automatic Slide Projector.....	2,500
Kingstree	Management—Three Steps.....	4,200
Chester	Thinking Behind Fire Prevention.....	3,000
Greenwood	Management Translite.....	40,000
Laurens	Insect Display.....	22,000
McCormick	Insect Display.....	4,300
Newberry	Common Woods of South Carolina.....	20,000
Orangeburg	Common Woods of South Carolina.....	15,000
Orangeburg (N)	Talking Smokey.....	10,000
Anderson	Common Woods of South Carolina.....	60,000
Anderson (N)	Common Woods of South Carolina.....	30,000
Easley	Forest Fire Control.....	20,000
Spartanburg (Piedmont Interstate)....	Fire Danger Protection.....	200 000
Union	Thinking Behind Fire Prevention in S. C.....	30,000
Rock Hill	Thinking Behind Fire Prevention.....	19,000
Charleston	Common Woods of South Carolina.....	35,000
Charleston (N)	Common Woods of South Carolina.....	10 000
Colleton	Smokey Cut-Out and Little Tree Flashograph....	8,000
Bishopville	Mr. Tree Farmer.....	12,000
		785,000
State Fairs		
Columbia	Judge Smokey "Are You Guilty, Too?".....	200,000
Columbia (N)	Judge Smokey "Are You Guilty, Too?".....	95,000
		295,000

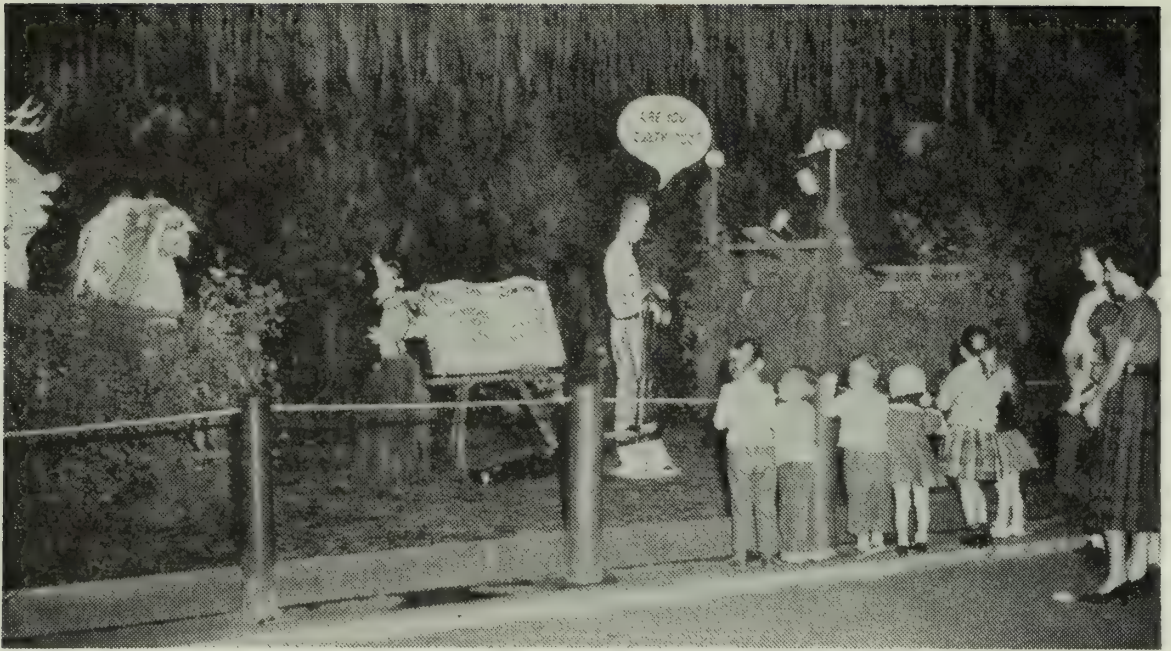
EXHIBITS, FLOATS AND DISPLAYS FOR SPECIAL EVENTS

(Other than County or State Fairs)

Cheraw (S. C. National Bank)—SPCA—Fire Control.....	3,000
Sumter (National Bank of S. C.)—Smokey Bear Trial Scene.....	10,000
Bishopville (The Peoples Bank)—Common Diseases of South Carolina Trees.....	2,000
Pageland (Peoples Bank & Trust Co.)—SPCA—Fire Control.....	2,000
Heath Springs (Bank of Heath Springs)—SPCA—Management.....	2,000
Columbia (C & S National Bank)—Common Diseases of South Carolina Trees.....	15,000
Columbia—5 Points (C & S National Bank)—Common Diseases of S. C. Trees.....	15,000
Lancaster (Bank of Lancaster)—SPCA—Management.....	7,000
Camden (Parade)—Smokey Bear on Ranger Truck.....	10,000
Cheraw (Parade)—Smokey Bear on Suppression Unit.....	10,000
Pageland (Watermelon Carnival)—Smokey Bear and Roadside Signs.....	20,000
Columbia (Fire Prevention Parade)—Trash Burning Float.....	50,000
Darlington (Electric Fair)—Management Panel and Insect Display.....	6,000
Dillon (Parade)—Smokey Bear.....	20,000
Dillon (Belk's Store)—Boy Scout.....	2,000
Lake City (Parade)—Smokey Bear and Roadsign Float.....	2,000
Florence (Parade)—Smokey Bear.....	20,000
Florence (Guaranty Bank)—Insects.....	2,000
Conway (Horry Electric Fair)—Fire Control Panel.....	3,000
Bennettsville (Marlboro Electric Fair)—Panel—Management.....	4,000
Bennettsville (Parade)—Smokey.....	8,000
Bennettsville (S. C. National Bank)—Fire Prevention and Forest Management.....	6,500
Bennettsville (Firemen's Parade)—Fire Control.....	1,000
Bennettsville (Smith's Grocery)—Protection and Management.....	300
Pageland (Chamber of Commerce)—Roadside Sign Float.....	20,000
Columbia (Jaycees)—Smokey Bear Suit.....	75
Burnt Gin (S. C. Agricultural Council)—Smokey Bear Suit.....	100
Columbia (Carolina Lumber & Builders Supply Assn.)—300 Million Dollar Business....	2,477
Georgetown (Boy Scout Program)—Smokey Bear Suit.....	100
Florence (Boy Scout Circus)—Smokey Bear Suit.....	1,000
Marion (Boy Scout Circus)—Smokey Bear Suit.....	1,000
Edgefield (Parade)—Smokey Bear Suit.....	10,000
Saluda (Parade)—Smokey Bear Suit.....	10,000
Bennettsville (Parade)—Smokey Bear Suit.....	10,000
Lexington (Parade)—Smokey Bear Suit.....	4,000
Aiken (Parade)—Smokey Bear Suit.....	5,000
Allendale (Parade)—Smokey Bear Suit.....	10,000
Orangeburg (Parade)—Smokey Bear Suit.....	15,000
Holly Hill (Parade)—Smokey Bear Suit.....	5,000
Branchville (Parade)—Fire Control Equipment.....	1,000
Denmark (Parade)—Smokey Bear Suit.....	3,000
Williston (Parade)—Smokey Bear Suit.....	4,000
Barnwell (Parade)—Smokey Bear Suit.....	4,500
Lexington (Parade)—Equipment.....	7,500
Lexington (Bank)—Tree Farm Exhibit.....	500
Olar (Garden Club)—Woods of South Carolina.....	500
Aiken (Bank)—Forest Fire Prevention.....	1,000
North Augusta (Bank)—Forest Management Exhibit.....	1,000
Williston (Bank)—Forest Management—SPCA.....	1,000
Graniteville (Bank)—Forest Fire Prevention.....	500
New Ellenton (Parade)—Smokey Bear Suit and Equipment.....	3,300
Barnwell (REA Fair)—Woods of South Carolina.....	3,500
Greenville (American Legion Fair)—Forest Management Translite.....	36,000
Clemson (Farmers Week)—Forest Fire Control.....	4,000
Rock Hill (Nature Museum)—Fire Prevention.....	600
Charleston (Francis Marion Hotel)—Management.....	4,500
Estill (Bank)—Management.....	250
Colleton (County Agriculture Building)—Forest Insect Display.....	250
Beaufort (County Agriculture Building)—Forest Insect Display.....	250
Hampton (County Agriculture Building)—Forest Insect Display.....	150
Garden City (Supply Store)—Forest Insect Display.....	750
Total	392,602
GRAND TOTAL.....	1,472,602

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperated generously with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, and on the educational and recreational facilities of South Carolina's state parks.



At the 1958 State Fair in Columbia Smokey serves as judge while other woodland characters serve as prosecutor and jury in the trial of a careless user of fire.

Several districts had regularly scheduled programs on various radio stations. Radio stations served the public exceptionally well by giving warnings, particularly during periods of high fire danger, and by giving tips on how to prevent fires.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that a total of 224 radio and TV programs on state parks and forestry were presented during the year. This number does not include, however, the many hundreds of recorded spot announcements and film spots carried by radio and television stations, as made available through the Cooperative Forest Fire Prevention Campaign, and spot announcement material prepared by the Commission of Forestry for special use during periods of high fire danger.

In addition to the Commission's radio programs and the spot announcements mentioned above, many radio stations broadcast programs produced as part of the nationwide Cooperative Forest Fire Prevention Campaign. Weekly programs featuring many of the well-known artists and stars proved popular and have been repeated several times on some stations. Many singing stars, such as Eddie Arnold, Billy Johnson, The Singing Woodsman and The Sons of the Pioneers, and Jelly Elliott promoted the forest fire prevention message. Television stations throughout the state cooperated with the national Cooperative Forest Fire

Prevention Campaign by using motion picture film spots featuring Smokey Bear with forest fire prevention messages.

TRAINING

A year-round program of training is conducted by the Commission of Forestry to make more effective the work of the Commission's personnel in carrying out the information and education job. The Commission continually strives to improve its educational techniques and methods. A good training program makes more effective and interesting every news release, every program, talk, and slide lecture used to promote better conservation practices throughout the state. An effective job of selling follows only after an effective program of training. Whether he is a forester in the central office, the district office, or a county ranger or warden in the county, or a superintendent or ranger in the state park system, participating in the Commission's over-all training program is an important part of his efforts to serve the public and carry out the functions of the Commission of Forestry.

NEWS RELEASES AND ARTICLES

Newspapers provide opportunities to present the conservation education program of the Commission and excellent press coverage helped place forestry and state parks news before the people regularly.

During the year Commission personnel prepared 718 news articles. This in no way gives the true picture of the news coverage that the Commission received during the year. Many times, especially during serious fire situations, news items are given orally to individual papers and to the wire services, and ultimately are presented to the public in this manner.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Pictures or prepared mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

BOYS' FORESTRY CAMP

The twelfth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period August 4-9. Ninety young men representing every county in the state attended the week-long camp. One boy from each county was selected on the basis of writing the best letter to his county ranger on the subject

“Why I Would Like to Attend Boys’ Forestry Camp.” On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and recreation characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by state parks.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies, and other organizations, groups, and agencies who published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission’s sign and woodworking shop continued to produce signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identified the various forestry and state park installations with the Commission of Forestry. The Commission’s exhibits constructed in the shop helped to bring

forestry and state park information to many people during the year.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must have demonstrated both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. His neighbors and others will see the sign and the good forestry practices and come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. The members of the S. C. Tree Farm Committee are:

Chairman—

Vern Cutler, Union Bag-Camp Paper Corp., Hardeeville

Members—

Joe Youorski, Champion Paper and Fiber Company, Newberry
Harvey Rhettberg, Poinsett Lumber and Mfg. Co., Pickens
H. F. Lathrop, Lightsey Brothers, Miley

H. F. Bishop, Consulting Forester, Marion

C. P. Key, Lodge

T. M. Folger, Taylor-Colquitt Company, Spartanburg

Charles H. Flory, State Forester, Columbia

George B. Nutt, Clemson Agricultural College, Clemson

James Chester, District Manager, AFPI, serves as Secretary to the State Tree Farm Committee.

As of June 30, 1959, there were 275 Tree Farms in the state comprising 1,573,953 acres.

Names of landowners certified during the past year are marked with an asterisk on the following list of South Carolina Tree Farmers:

SOUTH CAROLINA TREE FARMERS

NAME—ADDRESS	Certified Tree Farm Acreage
Mrs. Walter C. White, Stateburg.....	5,500
McBride Dabbs, Mayesville.....	2,960
J. T. Johnson, Lynchburg.....	100
C. M. Leonard, Camden.....	5,500
D. G. Lesslie, White Oak Farm, Rt. 2, Rock Hill.....	205
Corey P. Key, Lodge.....	1,220
M. P. Howell, Jr., Route 1, Ruffin.....	2,400
Poinsett Lumber & Manufacturing Co., Pickens.....	68,451
C. E. Bullard, Early Branch.....	180
Wade C. Harrison, Rt. 2, Troy.....	3,400
W. D. Summer, Rt. 2, Newberry.....	70
J. C. Rich, Islandton.....	250
Dr. C. L. Stevens, Campobello.....	163
Frank E. Timmerman, Edgefield.....	400
Joe L. Tolbert, Ninety Six.....	4,050
Pegues Family, RFD, Bennettsville.....	1,700
F. E. Cox, Rt. 2, Bennettsville.....	1,300
Tilghman Lumber Co., Marion.....	11,399
A. H. Rogers & Sons, Society Hill.....	550
Benton D. Dargan, Rt. 3, Darlington.....	1,000
S. B. Huff, Rt. 2, Piedmont.....	75
G. L. Williamson, Rt. 1, Florence.....	800
Mrs. H. B. McCall, Effingham.....	1,000
Koppers Co., Inc., Wood Preserving Div., Charleston.....	9,474
E. B. Hare, Star Route, Westminster.....	60
Dixie Clay Co., Bath.....	1,912

NAME—ADDRESS	Certified Tree Farm Acreage
John Tatum, Bamberg	300
J. F. Meares, Rt. 1, Nichols	200
H. N. Cousar, Rt. 1, Latta	500
Landon Thomas, 2226 Pickens Rd., Augusta, Ga.	515
J. R. Hawkins, Lykesland	110
Mrs. S. B. McMaster, 1900 Heyward St., Columbia 5	2,900
Mr. and Mrs. E. M. Harris, Bennettsville	275
S. J. Chandler, Minturn	400
J. B. Heins, Blythewood	85
J. Lamar Brantley, Manager, Good Hope Corporation, Ridgeland	12,000
International Paper Co., Southern Kraft Division, George- town	366,438
Mrs. E. M. and McIver Williamson, Mont Claire	1,225
H. N. Slater (The Pine Tree Timber Co.), Ridgeland	1,000
George Roberts, Pineland	50
Oscar Wigington, Salem	2,940
Union Bag & Paper Corp., Savannah, Ga.	54,757
Fairfield Forest Products Co., Newberry	110,256
J. H. A. Carter, Lodge	200
Niles C. Clark, Waterloo	665
S. W. Mims, Route 1, Harleyville	1,600
A. W. Murray, 2203 Johnston St., Newberry	4,684
E. F. Conger, Box 149, Staunton, Va.	6,435
West Virginia Pulp & Paper Co.	20,398
West Virginia Pulp & Paper Company, Georgetown	404,769
Ferdinand Gregorie, Mt. Pleasant	525
F. W. Atkinson, Rt. 4, Augusta, Ga.	155
Duke Power Company, Charlotte 1, N. C.	61,500
R. C. Kinard, Islandton	1,155
Homer Saunders, Rt. 3, Walterboro	3,500
E. Heyward Benton, Rt. 4, Walterboro	75
E. D. Kinard, Islandton, S. C.	268
M. W. Wise, Elko	187
L. W. Anderson, Box 432, Williston	860
Graniteville Company, Graniteville	15,550
O. L. Warr, Rt. 2, Timmons ville	200
E. V. Golding, Waterloo	135
J. T. Squires, Rt. 3, Latta	285

NAME—ADDRESS	Certified Tree Farm Acreage
D. H. Sullivan, Box 115, Lexington	149
Gair Woodlands Corp., Savannah, Ga.	65,683
C. A. Harper, Estill	4,000
Bruce Harter, Fairfax	450
Dunbar Oswald, Rt. 2, Allendale	700
Guy V. Whitener, College St. Extension, Newberry	1,847
Ben Alderman, Alcolu	1,680
G. T. Floyd, Manning	445
G. M. Bagnal, Rt. 3, Manning	40
M. Earl Stone, Rt. 1, Saluda	194
F. M. and M. S. Dwight, Eastover	144
Olin J. Kinsler, Rt. 1, Columbia	205
A. J. Lever, Rt. 1, Columbia	112
J. D. Peeples, Early Branch	308
Kendall Mills—Wateree Division, Camden	450
James L. Sweat, Boykin	600
H. Gates Lloyd, Haverford, Pa. & Richard W. Lloyd, 1707 Lyttleton St., Camden	2,854
R. W. Lloyd, 1707 Lyttleton St., Camden	1,370
Cypress Woods Corp., Ridgeland	20,000
Brooks B. Weber, Rt. 5, Union	800
Holliday Brothers, Galivants Ferry	2,000
W. H. Manning, Jr., Barnwell	549
Toumey Hospital, Sumter	1,900
Mrs. E. R. Mobley, 607 Edisto St., Johnston	1,000
George Patrick, Bowman	700
Anthony Fogle, Neeses	140
Union Memorial Presbyterian Church, Rt. 1, Winnsboro	425
Thomas W. Timms, Rt. 1, Box 60, Winnsboro	400
Cragmoor Farms, Moore	1,100
J. P. Brunson, Sr., Darlington	468
Eastover School, Eastover	5
William H. Wicker, University of Tennessee, Knoxville, Tennessee	586
P. T. Harris, Silverstreet	200
William E. Senn, Newberry	135
G. B. Reagin Est., Rt. 4, Newberry	250
Dr. J. E. Grant, 1817 Lindsey St., Newberry	197
E. Guy Foster, McConnells	400

NAME—ADDRESS	Certified Tree Farm Acreage
Charlton DuRant, Manning	229
E. E. Dargan, Conway	10,060
J. Porter Gaston, Richburg	155
J. T. Clinkscales, Rt. 1, Abbeville	370
Charles B. Abell, Lowrys	440
Dr. Stanley C. Baker, Greenwood	100
Misses Nora and Mae Davis, Troy	181
W. R. Cothran Estate, 312 Grace St., Greenwood	490
J. Hearst Coleman, 248 Jennings Ave., Greenwood	400
Frank J. Wideman, 1366 National Press Bldg., Wash- ington, D. C.	273
C. Cooper Sanders, Jr., and Howard P. Mabry, Green- wood	106
David Dows, Bradley	1,100
Henry G. Ligon, Rt. 2, Easley	24
J. B. Guess, Jr., Denmark	1,000
W. W. Woolsey, Montmorenci	500
Samuel H. Swint, Graniteville Company, Graniteville	327
Mrs Margaret H. Lloyd, Camden	800
Mrs. V. T. Chastain, Box 897, Hampton	317
Willie Reed Bishop, Rt. 4, Walterboro	100
R. C. DeLoach, Furman	405
Mrs. Annie M. Pinckney, 1006 Henderson St., Columbia	250
C. J. Cate, Jr., 129 S. Waccamaw, Columbia	455
John C. Billingsley, 924 Fair St., Newberry	111
J. Roy Cunningham, Rt. 6, Lancaster	300
Clyde D. Ware, Rt. 2, Iva	48
H. F. Bishop and C. H. Schaeffer, 316 Woodland Drive, Marion	161
Vance Perritt, Mullins	60
F. C. Edge, Mixonville	95
A. D. Strickland, Rt. 3, Loris	100
H. L. Bellamy, Wampee	25
J. M. Huber Corp., Langley	1,854
J. Ansel Caughman, Rt. 2, Leesville	1,200
G. E. King, McBee	950
R. D. King, McBee	270
Marlin H. Bruner and W. C. Nettles, Clemson	415
Marlin H. Bruner, Clemson	104

NAME—ADDRESS	Certified Tree Farm Acreage
A. C. Flora, 1511 Hagood Ave., Columbia.....	204
St. Clair Davis, Marion.....	250
Frank H. Covington, 311 Fayetteville Ave., Bennettsville	100
Helen S. Tiencken, 4009 Fessenden St., N. W., Washing- ton 16, D. C.....	297
Stewart C. Hope, Agent, 3350 Millwood, Box 5054, Columbia	505
Dr. R. N. Kennedy, 15 E. Jones Street, Savannah, Ga.....	264
Mrs. Sarah Goggans, Newberry.....	562
T. C. Jeter, 252 Sims Ave., Columbia.....	108
Dr. W. G. Gamble, Jr., 2010 Fifth Avenue, Bay City, Michigan	842
J. L. Mason, Clarks Hill.....	2,211
Atlantic Coast Line RR Co., Wilmington, N. C.....	376
W. H. Bradford, Rt. 4, Sumter.....	200
H. M. Hentz & Son, Box 181, Newberry.....	8,434
Hampton & Branchville RR Co., Inc., Hampton.....	4,902
Edward Duckworth, 1126 Douglas St., Newberry.....	44
Horace T. Oxner, Rt. 2, Saluda.....	107
Vance & Dwiggin Co., Newberry.....	783
Argent Lumber Co., Hardeeville.....	5,888
J. T. Strahan Co., Port Wentworth, Ga.....	1,655
Lightsey Bros. Lumber Co., Miley.....	39,584
Dr. and Mrs. Carnes Weeks, Mt. Holly.....	6,410
Hubert Boyd, Clinton.....	873
J. B. Frazier, Jr., and J. B. Frazier, III, Winnsboro.....	669
T. B. Amis, Box 71, Newberry.....	650
Mrs. T. A. Black, Sr., Rt. 2, Box 2, Ruffin.....	1,131
Bess Caldwell Bursinger, 2006 Luther St., Newberry.....	506
Albert G. McCaughrin, 1208 Calhoun St., Newberry.....	38
B. Hardin Keitt, 200 Hassel Place, Charlotte 7, N. C.....	874
J. Peter Grace, Jr., 7 Hanover Square, New York, N. Y.	12,700
R. L. Fairey, Jr., Rowesville.....	121
Dr. M. D. Farrar, 129 Folger St., Clemson.....	168
Thomas D. and Christine M. Hinkle, Sunset.....	225
Stiles M. Harper, Estill.....	2,654
Guy V. Whitener, Jr., E. Wells Park Drive, Newberry.....	389
Luke Winchester, Sunset.....	2,846
J. B. Frazier, III, Winnsboro.....	180

NAME—ADDRESS	Certified Tree Farm Acreage
Dr. G. W. Cunningham, Laurens.....	114
G. S. Carter, Jr., Heriot St., Charleston 31.....	1,183
Floride M. and William Glover, Willowbank, Georgetown	70
Atlantic Cresoting Co., Inc., 17 Battery Place, New York 4, N. Y.....	3,764
Vestal Lbr. & Mfg. Co., Knoxville, Tenn.....	5,922
W. W. Smith, Andrews.....	4,482
R. J. Makela, 530 W. Church St., Bishopville.....	697
D. L. Brown, 118 Harvard Drive, Spartanburg.....	89
Sam Hardin Smith, Rt. 3, Loris.....	290
Flack-Jones Lumber Co., Inc., Moncks Corner.....	3,200
J. D. Martin, Box 395, Summerville.....	300
C. Hutt Shelley, Nichols.....	433
Robert Kennerley, Newberry.....	65
R. M. Cooper & Archie Beattie, Wisacky.....	628
Est. of Susan Guingnard (R. Sanders Guignard, Trustee), Parkland Inc., Cayce, S. C.....	2,760
Phillip R. Freeman, Oakland, Calif.; Mrs. E. C. Coker, Clemson; Mrs. B. W. Porter, New Orleans, La.....	4,819
Porcher G. Rembert, Rt. 2, Box 45, Sumter.....	100
H. Chr. Sonne, 15 Exchange Place, Jersey City 2, N. J.....	9,500
Ellis Est. (H. H. Ellis, Agent), Rt. 5, Saluda.....	100
James Bledsoe, RFD, Saluda.....	15
H. T. Anderson, Macon, Ga.....	410
Wade Hampton Cobb, 1215 Anthony Ave., Columbia.....	70
Weyman Coleman, Rt. 5, Saluda.....	1,000
Calvin Rivers, Chesterfield	1,700
H. W. Merck, Rt. 2, Bishopville	166
Robt. J. Maxwell, Jr., 239 N. Main St., Greenville.....	80
Dr. L. W. Anderson, Williston.....	1,200
W. C. Ellis, Jr., Rt. 4, Abbeville.....	291
Holly Hill Lbr. Co., Holly Hill.....	11,270
O. H. Wienges & Son, St. Matthews.....	2,437
Miss Stella M. Ruff, Jenkinsville.....	72
B. F. Williamson, Rt. 3, Darlington.....	1,700
Dr. W. T. Martin, 605 McDaniel Ave., Greenville.....	125
William A. Douglas, Georgetown.....	33
Leger R. LaBruce, Georgetown.....	66
Norman G. Sifly, Orangeburg.....	120

NAME—ADDRESS	Certified Tree Farm Acreage
Fred Norris, Eutawville.....	495
A. B. Chace & M. G. Chace, Jr., Providence, R. I.....	9,224
A. B. Chace, Providence, R. I.....	2,577
Ben R. Wall, Jr., Chester	724
James A. Burden, Aiken.....	3,333
J. Cecil Berly, Pomaria.....	460
Raymond Booth, Aynor	60
S. A. Cooler, Walterboro.....	1,311
Boyd Jacobs, Georgetown.....	125
M. H. Jacobs estate, Kingstree.....	1,988
Roscoe M. Hinson, Kingstree.....	534
P. T. Mace, Gresham.....	1,797
T. C. Coxe, Jr., Darlington.....	17,500
Robert Nichols, Conway.....	185
Mrs. L. Jennie Cottingham, Dillon.....	341
F. R. Hemingway, Kingstree.....	87
Clyde Booth, Conway.....	288
Miss Rebecca Bryan, Conway.....	992
Mrs. Oline W. Smith, Georgetown.....	23
Canal Wood Corp., Conway.....	1,620
Paul & E. B. Sanders, Ritter.....	3,943
J. L. Aiken, Pickens.....	42
J. H. Fair, Jr., St. Matthews.....	610
Jacob R. Rogers, Dillon.....	408
Lucas M. Dargan, Darlington.....	110
W. E. & L. M. Dargan, Darlington.....	420
Dr. A. M. Rose, Jr. and Lucile R. Deal, Marion.....	513
Dixon Tire Service, Lancaster.....	210
Miss Virginia Gourdin, Charleston.....	674
B. A. Fretwell, Newberry	150
Carolina Tree Farms, Inc., Newberry.....	552
J. W. Yonce, Jr., Johnston	150
Randolph Watson, Anderson.....	925
Don Watson, Blaney.....	42
B. W. Crouch, Saluda	120
*Mrs. Dorothy G. Dial, 819 Woodland Dr., Columbia	280
*Dr. Frank C. Smith, 106 W. 7th St., Charlotte 2. N. C.....	225
*John E. Nisbet, Route 1, Lancaster.....	490

NAME—ADDRESS	Certified Tree Farm Acreage
*Oline W. Smith, Box 305, Georgetown, and S. O. Walters, Clemson Ave., Columbia.....	60
*J. Ryan Jeter, Santuc.....	325
*Erland Nelson, 1921 York Drive, Columbia.....	270
*Mrs. Naida Nelson, 1921 York Drive, Columbia.....	67
*R. A. Stevenson, Route 1, Richburg.....	1,219
*C. C. Hare, Star Route, Westminster.....	87
*V. M. Faircloth, Box 64, Andrews.....	117
*T. B. Castles, 116 Brawley Street, Chester.....	152
*Henry Savage, Jr., Box 234, Camden.....	2,485
*Joseph F. Havel, Pawleys Island.....	1,949
*Dr. Harrison L. Peeples, Scotia.....	3,726
*F. Hope Lever, Route 1, Columbia.....	87
*Dr. Archibald Rutledge, Rt. 1, Box 47, McClellanville....	2,000
*J. D. Lane, Box 404, Marion.....	90
*W. A. Coward, Aiken.....	960
*W. W., R. R., and Betty Bruner, c/o First National Bank, Columbia.....	226
*C. E. McDonald, E. College Street, Winnsboro.....	430
*Lt. George T. Kneese, Jr., 1820 Millwood Rd., Sumter....	185
*H. R. Drake, RFD, Drake.....	2,100
*Rogers M. Reid, Richburg.....	600
*Fred Hambright, Rt. 4, Chester.....	250
*Col. Felix T. Simpson, McConnells.....	576
*P. M. Brown, Rembert.....	240
*Margaret E. Hall, Rt. 2, Box 142, Camden.....	33
*J. C. Oswald, Allendale.....	1,317
*E. T. Kelly, Willowbank, Georgetown.....	2,800
*J. C. Winn, Plum Branch.....	3,026
*Anna S. and L. H. McCallum, Lugoff.....	550

ADMINISTRATION

SUMMARY

No state-appropriated funds were provided for salary or wage adjustments and as a result losses of both technical and other personnel continued at an excessive rate. A total of 59 employees resigned during the year of which 70% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and Park program \$2,853,619.01. Of this total the Division of Forestry expended \$2,449,867.64 and the Division of State Parks \$403,751.37 (see Appendix for detailed explanation of funds available and expenditures made). State appropriated funds amounted to \$1,582,013 for the Division of Forestry and \$350,871 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 58 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 7 accidents. Of the 7 accidents which occurred, only 1 was classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and the assistance of the National Safety Council.

The Commission instituted a safe driving program sponsored by the National Safety Council several years ago. Under this program a driver must operate a vehicle on official business for twelve consecutive months without a preventable accident before entitled to the first year safe driving award. If a preventable accident occurs during the first three years or before the third year award has been received, the driver's safe driving record is canceled and he is required to begin again. Should a preventable

accident occur after the third year award is received, the driver is penalized and is requested to operate for twelve additional months from date of accident before entitled to the next year award.

A review of the Commission's employees' safe driving records indicates that 129 of the 363 drivers have operated Commission or privately owned vehicles on official business for a period of one to five years without an accident; 88 for six to ten years; 103 for eleven to fifteen years; 43 for sixteen years and over.

COMMISSION PURCHASING

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and simplifying fiscal procedure. A total of 1,473 requisitions were received and 1,251 purchase orders were issued during the year.

Visual inventories were made during the year of all equipment in use by the Commission. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,746,182. In addition, the Commission has real property and improvements now estimated to be worth \$13,211,312.

PERSONNEL

A large number of Commission employees continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Fifteen per cent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

PERSONNEL LOSSES
Division of Forestry
Resignations—1958-1959

Foresters	3
Forestry Aides	5
District Radio Technician	1
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Technical	9
Clerk-Stenographers	8
Foreman	1
Rangers	3
Assistant Ranger	1
Wardens	14
Towermen	14
Tractor Operators	9
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Non-Technical	50
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Total Resignations	59

Losses Due to Promotions or Change in Positions

Management Assistant	1
Forester	1
Director, State Forest	1
Assistant Nurseryman	1
Equipment Operators	2
Warden	1
Towermen	5
Tractor Operators	3
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Total Losses, Division of Forestry	15
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Total Losses, Division of Forestry	74

Division of State Parks
Resignations—1958-1959

Superintendents	2
Rangers	3
Park Assistant, Fishing Pier.....	1
Laborers	6
	—
Total	12

Losses Due to Promotions or Change in Positions

Ranger	1
	—
Total Losses, Division of State Parks.....	13
	—
Grand Total—Personnel Losses	87

APPENDIX

**FINANCIAL STATEMENT
SOUTH CAROLINA STATE COMMISSION OF FORESTRY**

July 1, 1958-June 30, 1959

RECEIPTS

Division of Forestry:

Balance from 1957-58—Radio Comm. Fund.....	\$ 53.82
Balance from 1957-58—Federal Fund	38,521.55
Balance from 1957-58—Nursery Notes & Interest	51.04
State Appropriation—Operating	1,574,413.00
State Appropriation—Ridge Nursery Operation	86,400.00
State Appropriation—Manchester Land Purchase	1,200.00
Federal Funds—Protection C-M Law, Sec. 2	268,532.00
Federal Funds—Reforestation C-M Law, Sec. 4 & N-D	10,170.05
Federal Funds—Cooperative Farm Management	49,500.80
Federal Funds—Watershed Projects	32,296.75
Federal Funds—Agricultural Stabilization	13,075.36
Federal Funds—Conservation Program	365,803.89
Counties & Timber Firms	6,552.49
TVA Transportation Reimbursement	3,318.33
Georgia Seedlings	10,327.50
State Forests	95,163.86
Nurseries	367,455.05
Marking and Tallying Timber	9,176.90
Miscellaneous	3.17
Radio Communications	275.83

Total Receipts—Forestry	\$2,932,291.39
Less Receipts Deposited to Cr. State Revenue Account	454,959.79

Total Receipts Available for Expenditure	2,477,331.60
Total Expenditures	2,449,867.64

Balance—Division of Forestry	\$ 27,463.96*
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Division of State Parks:

Balance from 1957-58 Hunting Island Deposits....	\$ 2,868.98
Balance from 1957-58 Parks Improvements	17,014.06
Balance from 1957-58 Myrtle Beach Fishing Pier	2,966.67
Balance from 1957-58 Myrtle Beach Swimming Pool	1,146.12
State Appropriation—Operating	347,820.00
State Appropriation—Historical Areas	3,051.00
Forests & Parks Fund—Hunting Island Deposits	2,925.38
Myrtle Beach Fishing Pier	30,760.99

Myrtle Beach Swimming Pool.....	17,522.95	
Cabin Rentals	25,034.51	
Concession Stands.....	3,070.04	
Bathhouse & Swimming.....	52,882.97	
Boat Rentals.....	4,034.26	
Picnic Shelters, Recreation Bldgs. & Trailer Camps	17,385.57	
Group Camps.....	12,114.89	
Miscellaneous	385.95	
Hunting Island Grill.....	1,700.00	
<hr/>		
Total Receipts—Parks.....		542,684.34
Less Receipts Deposited to Cr. State Revenue Account		116,608.19
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Total Park Receipts Available for Expenditure		426,076.15
Total Park Expenditures.....		403,751.37
<hr/>		
Balance—Division of State Parks.....		22,324.78†

EXPENDITURES

Administrative & Technical.....	\$ 575,523.47	
State Forestry Nurseries.....	644,188.84	
State Forest Projects.....	98,804.54	
Fire Protection.....	1,118,234.46	
Balance on Loan for New Nursery to Gen. Fund	51.04	
Chesterfield, Richland & Sumter Counties—25% Receipts from State Forests.....	13,065.29	
<hr/>		
Total—Division of Forestry.....		2,449,867.64
Total—Division of Parks.....		403,751.37
<hr/>		
GRAND TOTAL—Expenditures.....		\$2,853,619.01

RECAPITULATION

Funds Available:

Division of Forestry.....	\$2,477,331.60
Division of State Parks	426,076.15

 2,903,407.75
Expenditures:

Division of Forestry.....	\$2,449,867.64
Division of State Parks	403,751.37

 2,853,619.01

Balance	49,788.74*†
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***Forestry :**

Federal Fund	\$ 27,134.31
Radio Communications.....	329.65

†Parks :

Hunting Island Deposits.....	\$ 3,482.61
Parks Improvements	15,091.96
M. B. Fishing Pier	2,494.32
M. B. Swimming Pool	1,255.89

 \$ 49,788.74

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1958-59

UNIT	Organized Personnel					Volunteer Personnel	Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	209	214
Aiken	1	4	2	5	12	618	630
Allendale	1	2	1	3	7	53	60
Anderson	1	2	1	3	7	375	382
Bamberg	1	2	1	2	6	177	183
Barnwell	1	2	2	2	7	319	326
Beaufort	1	3	2	4	10	87	97
Berkeley	1	4	2	4	11	459	470
Calhoun	1	2	1	2	6	142	148
Charleston	1	4	3	3	11	253	264
Cherokee	1	1	1	1	4	242	246
Chester	1	3	1	1	6	262	268
Chesterfield	1	3	1	4	9	94	103
Clarendon	1	3	2	3	9	461	470
Colleton	1	4	3	5	13	318	331
Darlington	1	2	..	3	6	388	394
Dillon	1	2	1	2	6	303	309
Dorchester	1	4	2	3	10	112	122
Edgefield	1	2	1	1	5	177	182
Fairfield	1	4	1	3	9	277	286
Florence	1	4	2	4	11	547	558
Georgetown	1	4	2	4	11	366	377
Greenville	1	3	1	4	9	1,117	1,126
Greenwood	1	2	1	2	6	156	162
Hampton	1	3	1	3	8	127	135
Horry	1	5	2	4	12	486	498
Jasper	1	3	2	2	8	327	335
Kershaw	1	3	2	6	12	272	284
Lancaster	1	3	1	2	7	247	254
Laurens	1	3	1	2	7	384	391
Lee	1	2	1	3	7	169	176
Lexington	1	3	2	5	11	483	494
McCormick	1	1	1	1	4	282	286
Marion	1	3	2	3	9	213	222
Marlboro	1	3	2	3	9	253	262
Newberry	1	2	1	2	6	100	106
Oconee	1	2	1	3	7	305	312
Orangeburg	1	5	3	5	14	818	832
Pickens	1	3	1	4	9	283	292
Richland	1	5	2	4	12	493	505
Saluda	1	2	1	1	5	170	175
Spartanburg	1	3	1	4	9	911	920
Sumter	1	3	2	3	9	817	826
Union	1	2	1	1	5	135	140
Williamsburg	1	5	2	4	12	751	763
York	1	2	1	4	8	441	449
TOTALS	46	134	68	138	386	15,979	16,365

TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1958—JUNE 30, 1959

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July	26	0.6	80.6	3.1
August	44	1.0	163.3	3.7
September	98	2.1	376.1	3.8
October	116	2.5	330.7	2.9
November	702	15.2	5,150.2	7.3
December	634	13.8	4,553.9	7.2
January	834	18.1	6,004.7	7.2
February	464	10.1	4,919.9	10.6
March	955	20.7	11,195.8	11.7
April	517	11.2	4,928.8	9.5
May	102	2.2	596.7	5.9
June	116	2.5	1,311.6	11.3
TOTALS	4,608	100.0	39,612.3	8.6

UNIT	Lightning		Railroads		Campers		Smokers		Burning		Incendiary		Lumbering		ous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	1	11.2	8	48.9	2	13.4	9	68.9	9	142.0	2	36.2	1	1.2	2	9.6	34	331.4
Aiken	2	8.7	6	15.8	10	477.0	55	438.4	57	371.6	8	21.1	11	102.5	67	140.1	216	1,575.2
Allendale			4	12.0			10	62.0	14	91.3	6	18.9			3	5.4	37	189.6
Anderson			1	12.8			33	124.8	42	239.2	11	61.4			4	18.6	92	464.5
Bamberg					4	9.4	13	69.6	18	99.3	7	41.6	2	26.6	1	0.6	45	247.1
Barnwell							30	287.6	24	394.4	10	37.5	1	2.4			66	725.1
Beaufort	1	3.2		20.0	3	7.6	23	220.6	16	48.6	31	276.6	4	2.8	4	18.0	80	598.2
Berkeley	1	4.0	2	17.0	2	10.0	123	964.0	23	186.0	84	1,496.2	2		2	5.0	237	2,678.2
Calhoun			1	1.5	2	15.4	23	173.7	1	5.0	17	132.9			1	1.5	45	330.0
Charleston			2	1.2	4	21.5	78	568.5	32	212.8	36	256.2			11	56.3	168	1,140.7
Cherokee			1	3.0			11	102.6	6	28.5	7	32.5	5	24.2	3	27.0	29	212.6
Chester			2	4.0	1	4.9	16	48.9	18	109.9	13	13.6	4	12.0	3	15.1	57	208.4
Chesterfield			1	3.0			6	33.3	9	1,006.3	24	46.6	5	25.4	6	17.2	53	1,136.8
Clarendon	2	5.0	1	5.0	19	183.5	53	331.3	49	421.9	57	441.6	3	6.1	9	34.5	191	1,423.9
Colleton			2	8.2	5	21.6	32	202.7	42	464.3	35	208.4	3	4.2	14	50.1	133	959.5
Darlington	2	9.8	1	6.9	3	5.7	39	430.0	31	233.9	7	57.1	2	45.0	2	13.0	87	801.4
Dillon			2	0.2			20	89.8	39	107.0	9	11.3	4	5.9	6	2.2	80	216.4
Dorchester			1	8.0	4	52.0	31	215.2	26	360.5					5	59.0	67	694.7
Edgefield	2	2.8			3	8.9	15	119.7	10	123.5	2	4.0		15.1	6	15.6	43	289.6
Fairfield			7	59.5			18	101.4	8	95.5				18.9	13	60.1	51	335.4
Florence			2	21.6	2	11.2	55	478.6	89	862.7	29	265.1	2	23.4	8	13.3	187	1,675.9
Georgetown					1	0.1	50	669.5	24	434.7	30	109.3				55.0	114	1,271.0
Greenville	1	2.4	4	8.3	6	5.1	80	271.4	72	348.8	3	10.0		5.4	55	215.7	222	864.7
Greenwood			1	4.4	1	0.5	16	55.5	12	21.2	4	4.1	1	0.3	5	10.8	40	96.8
Hampton							27	169.4	13	96.3	4	35.0	3	7.7	1	2.8	48	311.2
Horry	1	73.0			3	52.3	35	548.3	75	1,057.6	41	557.1	2	230.0	20	105.9	178	2,024.9
Jasper	2	3.1	1	224.0			23	293.9	26	183.8	52	1,283.4		6.6			107	1,994.8
Kershaw	1	3.5	3	33.0	5	31.0	15	51.5	22	175.3	13	73.0	1	12.0	6	82.0	66	461.3
Lancaster			1	6.0	1	15.0	26	142.9	12	62.2			1	6.8	1	11.0	42	243.9
Laurens			11	341.6	2	4.5	30	190.2	27	206.7	16	86.8	3	17.6	6	33.7	78	793.8
Lee							22	127.3	34	112.1	3	9.3	1	1.5	3	54.5	69	472.8
Lexington	1	3.0	7	15.4	7	8.1	23	76.6	34	112.1	1	3.0			12	7.8	87	232.3
Marion			1	2.1	2	14.4	6	13.1	20	66.6	1	37.1			3	1.7	33	100.9
Marlboro				30.0	3	13.1	37	225.2	43	280.8	12	6.8			7	9.2	103	595.4
McCormick			31	562.7	2	0.5	9	44.9	2	12.9	1	7.0			6	96.8	49	724.1
Newberry				5.8	2		5	21.2	4	23.1	1	3.6		15.2	4	26.6	19	99.4
Oconee			2	2.8			24	98.7	35	85.9	2	7.0		2.2	13	56.6	78	249.8
Orangeburg			3	14.0	16	161.7	98	940.9	65	878.9	168	1,927.6	3	20.2	12	166.4	365	4,109.7
Pickens				25.5			28	88.0	34	226.2	3	22.5			19	94.8	85	457.0
Richland			17	213.3	4	28.1	64	303.7	46	352.3	34	373.6			26	339.8	193	1,689.8
Saluda							13	43.4	4	34.3			2	79.0	3	10.6	25	108.1
Spartanburg			12	55.2	1	7.0	53	444.3	38	375.2	4	32.0	5	19.8	3	23.0	125	1,148.7
Sumter	3	2.5	1	110.0	4	2.8	84	446.9	61	389.5	39	588.1	1	2.0	16	31.2	207	1,572.0
Union			5	10.0			11	22.5	11	57.5	7	13.0	2	2.5	8	25.5	44	131.0
William-burg					3	38.4	31	213.9	70	826.0	48	1,521.5			9	41.8	161	2,641.6
York			1	2.0			20	141.0	33	185.1	1	3.5			17	51.1	72	382.7
TOTALS	20	132.2	151	1,915.4	126	1,224.7	1,523	10,775.8	1,371	12,295.4	883	10,170.1	90	772.2	444	2,326.5	4,608	39,612.3

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1958-59

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL No.
Abbeville .....	....	25	9	....	....	34
Aiken	33	164	15	4	....	216
Allendale	1	32	4	....	....	37
Anderson	1	79	12	....	....	92
Bamberg	3	34	8	....	....	45
Barnwell	5	50	10	1	....	66
Beaufort	2	69	9	....	....	80
Berkeley	8	175	51	3	....	237
Calhoun	4	33	8	....	....	45
Charleston	12	129	27	....	....	168
Cherokee .....	....	23	6	....	....	29
Chester	4	47	6	....	....	57
Chesterfield	10	37	5	....	1	53
Clarendon	11	150	30	....	....	191
Colleton	17	93	23	....	....	133
Darlington	9	55	22	1	....	87
Dillon	36	38	6	....	....	80
Dorchester .....	....	43	24	....	....	67
Edgefield	3	38	2	....	....	43
Fairfield .....	....	42	9	....	....	51
Florence	7	131	49	....	....	187
Georgetown	24	66	23	1	....	114
Greenville	40	165	17	....	....	222
Greenwood .....	....	39	1	....	....	40
Hampton	1	43	4	....	....	48
Horry	23	91	62	2	....	178
Jasper	9	68	26	4	....	107
Kershaw .....	....	51	15	....	....	66
Lancaster	4	29	9	....	....	42
Laurens	10	52	15	1	....	78
Lee	2	53	14	....	....	69
Lexington	19	63	5	....	....	87
Marion	4	27	2	....	....	33
Marlboro	14	79	9	1	....	103
McCormick	6	34	7	2	....	49
Newberry	1	15	3	....	....	19
Oconee	9	64	5	....	....	78
Orangeburg	3	262	98	2	....	365
Pickens	8	66	10	1	....	85
Richland	16	145	30	2	....	193
Saluda	2	19	4	....	....	25
Spartanburg	1	101	22	1	....	125
Sumter	19	153	31	4	....	207
Union .....	....	43	1	....	....	44
Williamsburg	38	78	39	6	....	161
York	5	56	11	....	....	72
TOTAL	424	3,349	798	36	1	4,608

UNIT	July 1958		Aug. 1958		Sept. 1958		Oct. 1958		Nov. 1958		Dec. 1958		Jan. 1959		Feb. 1959		Mar. 1959		April 1959		May 1959		June 1959	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	1	11.2	1	0.8	4	36.8	2	3.6	6	41.5	1	5.6	2	130.7	2	11.5	12	111.9	4	104.3	1	4.2	1	104.3
Aiken	2	3.8	15	103.8	9	30.5	18	21.6	45	443.5	28	156.5	20	271.7	25	271.7	25	150.2	17	228.1	9	17.6	9	228.1
Allendale	1	4.0	3	11.8	3	11.8	1	3.0	7	54.5	4	8.0	4	32.0	5	40.0	5	40.0	2	2.3	2	9.0	2	2.3
Anderson	1	1.0	..	..	..	..	1	1.5	16	55.8	3	5.0	3	42.5	3	8.0	32	192.8	18	141.2	4	9.3	1	6.4
Bamberg .....	..	..	..	..	..	..	5	21.0	11	70.0	9	62.2	10	25.6	4	10.3	4	10.3	2	21.0	1	5.0	..	..
Barnwell	2	10.4	..	5.6	3	54.8	1	1.0	12	82.8	12	35.2	18	108.9	6	203.4	6	203.4	2	92.0	1	7.2	1	2.0
Beaufort .....	..	..	4	4.0	4	10.0	1	4.0	8	29.5	16	75.9	22	204.9	12	122.8	8	28.0	6	13.1	1	100.0	1	6.0
Berkeley .....	..	..	..	0.1	..	..	2	1.1	11	124.5	35	235.7	34	347.5	41	409.9	60	919.5	44	615.8	6	14.1	3	10.0
Calhoun	1	2.8	..	..	..	..	1	0.6	12	121.3	9	39.2	5	17.0	9	70.6	2	6.3	2	6.3	..	..	1	1.0
Charleston .....	..	..	..	..	2	1.0	3	4.9	11	52.9	24	169.4	23	232.3	29	166.4	19	212.6	6	39.0	..	..	2	14.0
Cherokee .....	..	..	..	..	1	3.0	..	1.5	4	29.4	7	25.5	1	15.0	9	99.2	6	39.0	6	39.0	..	..	3	6.4
Chester .....	..	..	..	..	10	23.5	..	..	11	46.8	6	7.7	3	3.2	14	75.7	3	16.7	3	16.7	1	0.9	2	5.0
Chesterfield	2	14.0	..	..	5	4.1	..	..	8	15.7	4	4.8	9	36.9	17	1,017.9	9	32.4	9	32.4	..	..	3	17.0
Clarendon .....	..	..	..	..	2	5.2	..	0.1	23	66.6	46	260.1	45	383.7	31	290.1	19	227.0	16	109.2	2	32.0	5	17.0
Colleton .....	..	..	..	1.5	2	33.0	1	0.8	13	57.6	23	140.3	43	211.7	13	330.8	16	109.2	16	109.2	2	24.0	1	0.5
Darlington .....	..	..	..	2.7	..	..	1	0.2	13	86.0	12	57.3	15	103.2	9	66.4	22	363.8	7	92.9	1	0.5	5	28.4
Dillon	1	0.1	1	0.1	2	0.6	..	..	7	17.7	13	11.3	8	97.1	17	61.9	7	7.5	7	7.5	..	..	7	6.7
Dorchester .....	..	..	..	..	..	..	1	30.0	4	7.6	8	54.0	15	120.1	9	82.5	13	190.0	12	118.5	3	69.0	2	23.0
Edgefield	2	0.3	..	7.8	3	6.3	3	10.5	10	205.1	3	13.2	8	13.6	4	9.8	4	11.8	4	10.3	1	0.9	..	27.8
Fairfield .....	..	..	..	4.9	1	5.0	3	7.0	18	71.2	6	13.2	2	23.8	3	33.0	4	96.8	7	47.7	1	5.0	4	0.3
Florence .....	..	..	..	..	..	..	2	11.3	24	122.9	39	447.4	47	411.6	21	203.0	42	426.8	10	49.6	1	3.0	1	33.1
Georgetown .....	..	..	..	2.4	..	..	..	..	6	44.3	25	90.2	21	98.5	9	74.1	27	397.4	19	512.9	4	18.1	2	1.6
Greenville	4	9.6	1	3.0	6	19.6	10	9.1	49	122.2	15	33.7	21	67.3	11	33.3	69	357.5	29	198.6	4	9.2	3	3.5
Greenwood .....	..	..	..	..	..	..	..	..	11	34.7	8	16.8	6	7.9	2	1.5	5	14.0	4	10.9	2	7.5	2	8.6
Hampton .....	..	..	..	..	3	7.1	2	4.6	11	22.8	7	67.0	6	23.5	6	51.7	11	110.4	4	15.5	..	..	4	143.5
Horry	2	1.6	..	9.2	3	9.2	2	1.3	16	99.4	31	375.7	21	353.1	23	444.9	47	988.7	20	177.6	4	29.9	9	249.0
Jasper	1	1.0	1	1.6	1	1.6	1	1.5	8	78.0	14	456.0	35	509.9	19	554.0	17	91.6	6	42.1	2	8.0	2	19.5
Kershaw .....	..	..	..	3.0	3	7.5	..	..	11	94.0	8	22.5	5	38.4	7	38.0	16	167.0	10	58.4	2	13.0	3	..
Lancaster .....	..	..	..	..	1	5.8	..	0.6	6	13.4	2	9.8	4	29.5	3	6.2	13	52.1	11	111.5	1	15.0	..	..
Laurens	1	4.0	..	21.7	4	21.7	4	23.7	11	144.7	8	14.7	3	4.3	5	18.0	23	389.9	16	168.4	3	4.4	..	..
Lee .....	..	..	..	..	..	..	..	..	14	92.0	9	21.6	21	122.7	10	82.4	10	102.1	4	50.5	..	..	..	..
Lexington .....	..	..	1	1.5	2	1.4	5	4.5	15	14.4	9	22.5	13	20.3	9	41.2	15	36.6	10	68.7	4	12.2	4	10.2
Marion .....	..	..	..	0.3	..	..	..	..	3	2.2	11	16.6	3	14.6	3	6.8	6	31.3	4	8.0	1	10.0	1	0.4
Marlboro .....	..	..	..	..	..	..	..	..	15	14.4	9	22.5	27	117.2	11	93.8	26	200.6	2	13.0	..	..	13	94.3
McCormick	1	6.5	..	4.5	2	4.5	1	3.2	11	30.5	8	44.7	2	2.0	..	..	19	157.7	4	27.5	..	..	..	..
Newberry .....	..	..	..	..	3	4.2	1	3.0	7	466.9	8	16.4	12	13.5	..	..	4	29.5	3	3.5	..	..	1	0.3
Oconee .....	..	..	..	..	..	..	2	9.8	6	16.7	6	16.4	12	13.5	6	5.2	27	80.5	18	107.4	..	..	1	0.3
Orangeburg .....	..	..	2	9.9	3	25.2	4	10.1	83	777.5	56	728.1	89	1,047.2	50	535.0	42	756.3	23	180.2	7	16.3	6	23.9
Pickens	1	2.8	..	8.0	2	8.0	5	5.6	18	24.4	8	28.5	13	45.9	7	44.6	17	148.1	14	149.1	..	..	8	18.6
Richland	1	4.0	1	4.0	6	22.2	3	35.3	42	501.3	19	195.3	30	100.0	14	221.2	33	510.8	25	70.0	6	7.1	1	2.4
Saluda .....	..	..	..	..	..	..	8	18.6	8	17.6	3	7.8	2	9.8	..	..	1	5.6	7	46.3	..	..	1	3.8
Spartanburg	2	3.5	..	3.5	3	5.0	3	5.0	35	254.4	10	47.5	5	15.5	6	15.4	44	622.3	16	177.8	..	..	2	2.4
Sumter .....	..	..	1	0.9	1	4.0	1	4.0	25	249.9	33	121.5	45	464.4	27	98.5	47	484.0	18	128.8	7	11.9	3	8.1
Union .....	..	..	2	1.5	2	4.0	5	10.0	7	10.0	2	9.0	6	15.5	4	20.5	10	35.0	5	25.0	1	0.5	..	..
Williamsburg .....	..	..	1	3.0	..	..	2	3.1	9	108.8	16	298.6	52	237.2	22	595.1	27	437.2	16	341.0	10	110.8	6	506.8
York .....	..	..	..	..	2	3.1	3	27.2	16	101.0	7	17.0	5	26.3	4	25.8	21	131.7	13	48.6	1	2.0	..	..
TOTALS	26	80.6	44	163.3	98	376.1	116	330.7	702	5,150.2	634	4,553.9	834	6,004.7	464	4,919.9	955	11,195.8	517	4,928.8	102	596.7	116	1,311.6

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1958-59

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	20	0.4	132.2	6.6
Railroads	151	3.3	1,915.4	12.7
Campers	126	2.7	1,224.7	9.7
Smokers	1,523	33.0	10,775.8	7.1
Debris Burning	1,371	29.8	12,295.4	9.0
Incendiary	883	19.2	10,170.1	11.5
Lumbering	90	2.0	772.2	8.6
Miscellaneous	444	9.6	2,326.5	5.2
TOTALS	4,608	100.0	39,612.3	8.6

TABLE 7—CAUSES OF FIRES—FIVE YEAR PERIOD
(Percent of Total)

CAUSES	1954-55	1955-56	1956-57	1957-58	1958-59	Average For 5-Year Period
Lightning	2.4	1.1	1.7	1.1	0.4	1.3
Railroads	2.7	1.6	2.3	2.6	3.3	2.5
Campers	2.6	2.6	2.7	3.1	2.7	2.7
Smokers	26.1	23.8	26.0	27.0	33.0	27.2
Debris Burning	19.3	22.1	21.9	20.1	29.8	22.6
Incendiary	37.0	39.4	35.3	34.7	19.2	33.1
Lumbering	3.4	2.5	2.4	2.1	2.0	2.5
Miscellaneous	6.5	6.9	7.7	9.3	9.6	8.0

TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—1958-59

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
Abbeville	167,647	34	331.4	.20	9.7
Aiken	401,376	216	1,575.2	.39	7.3
Allendale	131,400	37	189.6	.14	5.1
Anderson	173,700	92	464.5	.27	5.0
Bamberg	126,000	45	247.1	.20	5.5
Barnwell	74,565	66	725.1	.97	11.0
Beaufort	165,000	80	598.2	.36	7.5
Berkeley	399,091	237	2,678.2	.67	11.3
Calhoun	123,500	45	330.0	.27	7.3
Charleston	271,114	168	1,140.7	.42	6.8
Cherokee	127,800	29	212.6	.17	7.3
Chester	260,023	57	208.4	.08	3.7
Chesterfield	310,000	53	1,136.8	.37	21.4
Clarendon	228,500	191	1,423.9	.62	7.5
Colleton	465,000	133	959.5	.21	7.2
Darlington	208,500	87	801.4	.38	9.2
Dillon	144,100	80	216.4	.15	2.7
Dorchester	268,200	67	694.7	.26	10.4
Edgefield	172,363	43	289.6	.17	6.7
Fairfield	338,957	51	335.4	.10	6.6
Florence	293,900	187	1,675.9	.57	9.0
Georgetown	415,600	114	1,271.0	.31	11.1
Greenville	267,800	222	864.7	.32	3.9
Greenwood	198,963	40	96.8	.05	2.4
Hampton	239,500	48	311.2	.13	6.5
Horry	557,600	178	2,624.9	.47	14.7
Jasper	303,400	107	1,994.8	.66	18.6
Kershaw	336,500	66	461.3	.14	7.0
Lancaster	199,400	42	243.9	.12	5.8
Laurens	244,621	78	793.8	.32	10.2
Lee	110,600	69	472.8	.43	6.9
Lexington	291,500	87	232.3	.08	2.7
Marion	224,700	33	100.9	.04	3.1
Marlboro	150,600	103	595.4	.40	5.8
McCormick	144,859	49	724.1	.50	14.8
Newberry	204,949	19	99.4	.05	5.2
Oconee	257,632	78	249.8	.10	3.2
Orangeburg	318,800	365	4,109.7	1.29	11.3
Pickens	190,100	85	457.0	.24	5.4
Richland	289,500	193	1,689.8	.58	8.8
Saluda	149,946	25	108.1	.07	4.3
Spartanburg	208,300	125	1,148.7	.55	9.2
Sumter	205,400	207	1,572.0	.77	7.6
Union	157,894	44	131.0	.08	3.0
Williamsburg	429,800	161	2,641.6	.61	16.4
York	226,300	72	382.7	.17	5.3
TOTALS	11,175,000	4,608	39,612.3	.35	8.6

TABLE 9—FIVE YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1954-55	11,300,008	7,022	158,785.5	1.41	22.6
1955-56	11,300,008	4,506	76,743.5	0.68	17.0
1956-57	11,300,008	3,883	46,777.8	0.41	12.0
1957-58	11,300,008	2,590	20,253.0	0.18	7.8
1958-59	11,175,000	4,608	39,612.3	0.35	8.6
Five Year Average	11,275,006	4,522	68,434.4	0.61	15.1

TABLE 10—S. C. STATE COMMISSION OF FORESTRY 1958-59 SEEDLING DISTRIBUTION BY LAND CLASSIFICATION

Land Ownership	Trees Planted
Farmers	97,053,000
Other Individuals	24,262,000
Associations and Clubs	256,000
Schools	115,000
State Forests	1,312,000
Other State Lands	2,110,000
Other Public Lands	704,000
Forest Industries	7,543,000
Other Industries	1,152,000
Federal Lands	546,000
TOTAL	135,053,000

In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

West Virginia Pulp & Paper Company	11,092,000
Atomic Energy Commission	10,717,000
Gair Woodlands Corporation	3,362,000
Union Bag-Camp Paper Corporation	2,083,000
International Paper Co.	1,719,000
Champion Paper & Fibre Co.	2,325,000
Totals	31,298,000

Grand Totals, trees planted in S. C. 1958-59166,351,000

The above figures include 11,068,000 loblolly pine seedlings which were custom grown for South Carolina by TVA nurseries.

TABLE 11—S. C. STATE COMMISSION OF FORESTRY 1958-59 SEEDLING DISTRIBUTION
BY COUNTY AND SPECIES

COUNTY	Loblolly	Slash	Longleaf	White Pine	Species Misc.	Total
Abbeville	1,703,000	.....	1,000	1,000	1,000RC	1,706,000
Aiken	132,000	7,153,000	22,000	.....	1,000RC-36,000AC	7,344,000
Allendale	477,000	5,878,000	.....	.....	.....	6,355,000
Anderson	3,656,000	30,000	2,000	9,000	5,000RC-9,000AC-5,000Shl.	3,716,000
Bamberg	198,000	4,496,000	.....	.....	3,000AC-2,000YP	4,699,000
Barnwell	229,000	8,817,000	.....	.....	8,000AC	9,054,000
Beaufort	1,000	513,000	.....	.....	1,000RC-7,000AC	522,000
Berkeley	806,000	899,000	.....	.....	1,000RC	1,706,000
Calhoun	326,000	2,763,000	.....	.....	6,000AC-1,000YP	3,096,000
Charleston	26,000	359,000	1,000	1,000	7,000AC-2,000YP	396,000
Cherokee	1,085,000	5,000	1,000	.....	1,000RC	1,092,000
Chester	2,282,000	79,000	.....	.....	9,000AC	2,370,000
Chesterfield	390,000	7,640,000	79,000	2,000	2,000RC-5,000AC	8,118,000
Clarendon	418,000	4,103,000	3,000	.....	2,000AC-2,000YP	4,528,000
Colleton	1,083,000	4,308,000	21,000	.....	1,000RC-25,000AC	5,448,000
					10,000 Spruce	
Darlington	103,000	1,711,000	7,000	.....	2,000RC-1,000AC-1,000YP	1,825,000
Dillon	114,000	858,000	3,000	.....	1,000AC	976,000
Dorchester	262,000	805,000	.....	.....	3,000AC	1,070,000
Edgefield	1,797,000	244,000	.....	.....	1,000RC-2,000AC	2,044,000
Fairfield	1,541,000	178,000	.....	.....	3,000AC-2,000YP-13,000Shl.	1,737,000
Florence	151,000	835,000	16,000	.....	2,000RC	1,004,000
Georgetown	142,000	521,000	.....	.....	9,000AC	672,000
Greenville	1,597,000	10,000	1,000	162,000	3,000RC-22,000AC-1,000Shl.	1,796,000
Greenwood	1,756,000	5,000	.....	6,000	2,000RC-2,000AC	1,771,000
Hampton	40,000	5,869,000	.....	.....	3,000AC	5,912,000
Horry	50,000	1,959,000	.....	.....	1,000RC-1,000AC	2,011,000
Jasper	158,000	1,517,000	.....	.....	.....	1,675,000
Kershaw	1,460,000	6,554,000	17,000	.....	10,000RC-4,000AC-1,000YP	8,046,000
Lancaster	2,217,000	242,000	.....	1,000	1,000RC-2,000AC	2,463,000
Laurens	3,705,000	.....	.....	.....	2,000RC-4,000AC	3,711,000
Lee	341,000	1,058,000	12,000	.....	9,000AC	1,420,000
Lexington	606,000	3,077,000	10,000	1,000	1,000RC-17,000AC	3,712,000
Marion	142,000	668,000	1,000	5,000	2,000RC-15,000AC	833,000
Marlboro	337,000	1,752,000	1,000	.....	4,000AC	2,094,000
McCormick	666,000	30,000	.....	.....	.....	696,000
Newberry	2,024,000	418,000	1,000	.....	6,000AC-10,000YP	2,459,000
Oconee	1,907,000	11,000	.....	42,000	2,000RC-2,000AC-1,000YP	2,019,000
					54,000Shl.	
Orangeburg	406,000	8,053,000	39,000	.....	1,000RC-25,000AC	8,524,000
Pickens	1,511,000	.....	.....	161,000	3,000RC-3,000AC-2,000YP	1,699,000
					19,000Shl.	
Richland	1,515,000	1,962,000	18,000	.....	5,000RC-9,000AC	3,509,000
Saluda	640,000	179,000	.....	1,000	.....	820,000
Spartanburg	2,018,000	3,000	.....	77,000	4,000AC	2,102,000
Sumter	459,000	2,748,000	5,000	.....	11,000RC-8,000AC	3,231,000
Union	833,000	5,000	.....	.....	.....	838,000
Williamsburg	310,000	780,000	1,000	.....	9,000AC	1,100,000
York	3,122,000	6,000	.....	4,000	1,000RC-1,000AC	3,134,000
Totals	44,742,000	89,101,000	262,000	473,000	63,000RC-286,000AC 24,000YP-92,000Shl. 10,000 Spruce	135,053,000

In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

West Virginia Pulp & Paper Company	11,092,000
Atomic Energy Commission	10,717,000
Gair Woodlands Corporation	3,362,000
Union Bag-Camp Paper Corporation	2,083,000
International Paper Co.	1,719,000
Champion Paper & Fibre Co.	2,325,000

Totals 31,298,000

Grand Totals, trees planted in S. C. 1958-59 166,351,000

The above figures include 11,068,000 loblolly pine seedlings which were custom grown for South Carolina by TVA nurseries.

TABLE 12—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

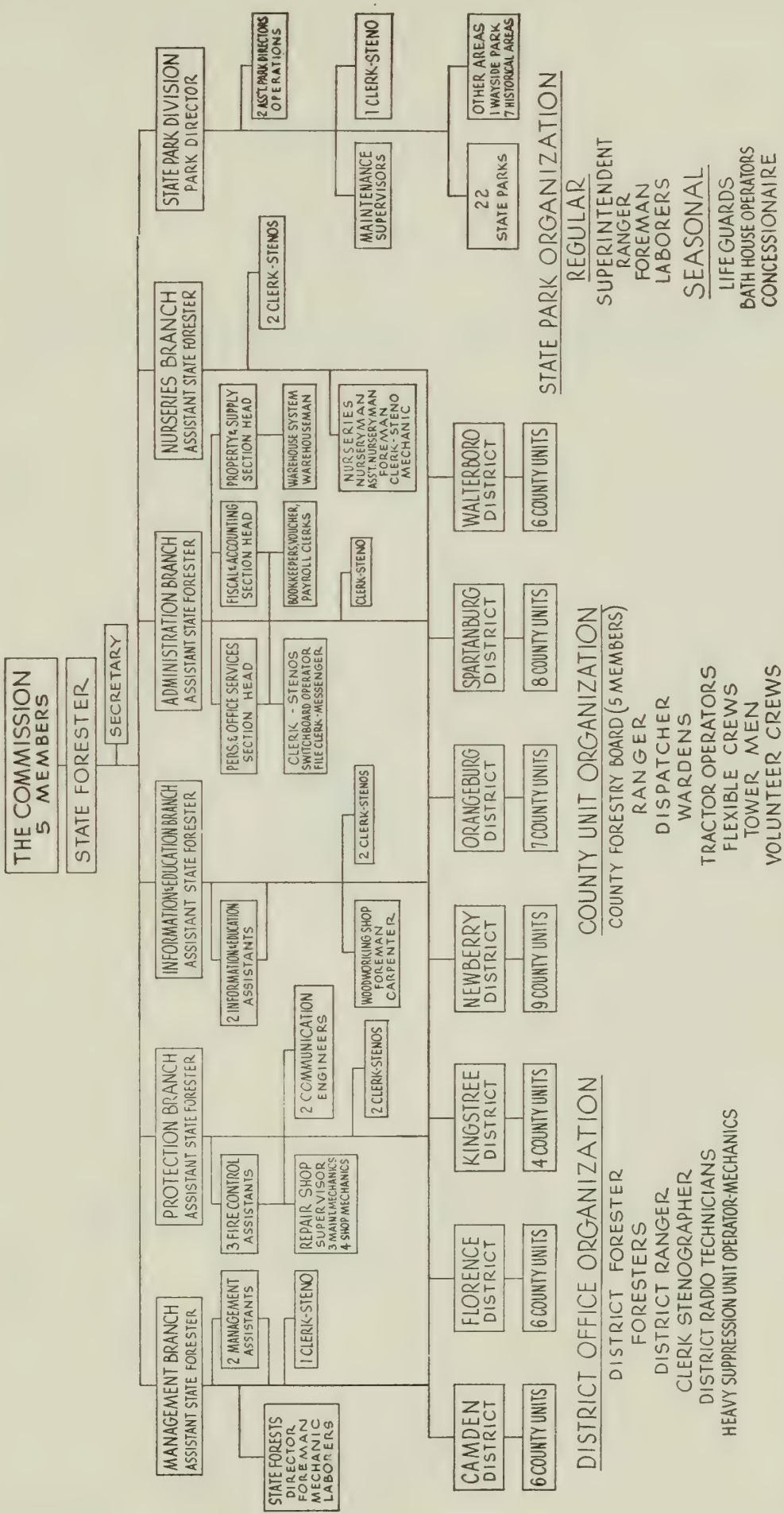
County	Seedlings Planted 1929-1958	Seedlings Planted 1958-1959	Grand Total Planted To Date	Acres Planted Through June 30, 1959	Acres Needing Planting as of June 30, 1959
Abbeville	10,535,788	2,032,000	12,567,788	12,568	64,000
Aiken	81,909,200	7,414,000	89,323,200	89,323	133,000
Allendale	17,769,895	7,450,000	25,219,895	25,220	40,480
Anderson	12,609,447	3,810,000	16,419,447	16,419	60,463
Bamberg	5,987,950	5,636,000	11,623,950	11,624	20,000
Barnwell	18,389,902	19,771,000	38,160,902	38,161	46,260
Beaufort	3,527,845	902,000	4,429,845	4,430	58,112
Berkeley	18,176,635	2,909,000	21,085,635	21,086	66,676
Calhoun	5,159,350	3,096,000	8,255,350	8,255	40,056
Charleston	3,490,440	529,000	4,019,440	4,019	35,000
Cherokee	5,351,629	1,337,000	6,688,629	6,689	31,400
Chester	11,862,800	2,459,000	14,321,800	14,322	39,466
Chesterfield	19,464,850	8,352,000	27,816,850	27,817	68,000
Clarendon	8,766,915	4,528,000	13,294,915	13,295	42,300
Colleton	15,215,880	6,227,000	21,442,880	21,443	93,460
Darlington	5,144,320	1,825,000	6,969,320	6,969	35,422
Dillon	3,080,455	1,002,000	4,082,455	4,082	19,504
Dorchester	13,636,180	2,916,000	16,552,180	16,552	48,210
Edgefield	6,618,038	2,251,000	8,869,038	8,869	23,700
Fairfield	9,374,679	1,880,000	11,254,679	11,255	25,000
Florence	3,379,268	1,004,000	4,383,268	4,383	12,538
Georgetown	10,266,700	1,818,000	12,084,700	12,085	43,187
Greenville	5,665,129	1,928,000	7,593,129	7,593	78,364
Greenwood	10,818,622	1,836,000	12,654,622	12,655	33,000
Hampton	15,822,365	6,774,000	22,596,365	22,596	63,796
Horry	9,770,900	3,120,000	12,890,900	12,891	47,272
Jasper	16,891,010	4,034,000	20,925,010	20,925	40,092
Kershaw	35,764,737	9,530,000	45,294,737	45,295	83,357
Lancaster	11,393,593	2,561,000	13,954,593	13,955	39,000
Laurens	12,942,490	4,852,000	17,794,490	17,794	52,362
Lee	2,757,555	1,420,000	4,177,555	4,178	53,504
Lexington	8,979,290	3,806,000	12,785,290	12,785	40,308
Marion	3,593,945	937,000	4,530,945	4,531	39,000
Marlboro	8,649,530	2,094,000	10,743,530	10,744	45,042
McCormick	3,438,825	846,000	4,284,825	4,285	12,882
Newberry	11,673,523	3,422,000	15,095,523	15,096	30,492
Oconee	6,386,835	2,071,000	8,457,835	8,458	51,905
Orangeburg	13,101,150	8,836,000	21,937,150	21,937	95,002
Pickens	7,432,355	1,699,000	9,131,355	9,131	44,246
Richland	13,624,028	4,428,000	18,052,028	18,052	65,681
Saluda	3,198,121	993,000	4,191,121	4,191	23,956
Spartanburg	10,720,999	2,595,000	13,315,999	13,316	46,641
Sumter	21,336,465	3,231,000	24,567,465	24,567	46,868
Union	11,135,399	1,454,000	12,589,399	12,589	49,570
Williamsburg	5,599,065	1,130,000	6,729,065	6,729	59,423
York	12,048,506	3,606,000	15,654,506	15,655	59,500
Totals	552,462,603	*166,351,000	718,813,603	718,814	**2,247,497

* The total includes 31,298,000 seedlings produced by industry nurseries or brought into the state from outside sources.

** Estimates of "1958 Conservation Needs Committee."

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

ORGANIZATION CHART



STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1959 TO JUNE 30, 1960



CHARLES H. FLORY, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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To Honorable Ernest F. Hollings, Governor, and to the General Assembly of South Carolina:

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1959 to June 30, 1960.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,
Fulton B. Creech, *Chairman*.

PERSONNEL

S. C. STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1960)

Members of the Commission

Fulton B. Creech, Chairman, Sumter

E. Craig Wall, Conway

Dr. Robert C. Edwards, President, Clemson College, Clemson

A. B. Taylor, Sr., Spartanburg

John C. Pracht, Greenwood

Secretary of the Commission

Chas. H. Flory, State Forester

DIVISION OF STATE PARKS

C. West Jacocks, State Park Director

T. D. Ravenel, Assistant State Park Director—Operations

E. R. Vreeland, Assistant State Park Director—Operations

State Park Superintendents

Aiken State Park, L. Storm Bailey, Windsor

Andrew Jackson Historical State Park, Cecil S. Hayes, Route 1, Lancaster

Barnwell State Park, Mrs. D. I. Ross, Blackville

*Cheraw State Park, George T. Holder, Cheraw

Chester State Park, Clarence Doster, Chester

Croft State Park, J. E. Thornton, Spartanburg

Edisto Beach State Park, Keith M. Fleischman, Edisto Island

Givhans Ferry State Park, Wm. Wiggins, Jr., Ridgeville

*Greenwood State Park, Van W. Pressley, Ninety Six

*Hunting Island State Park, Norman B. Cooler, Frogmore

Kings Mountain State Park, Raymond M. Sisk, Kings Creek

Lee State Park, Joe Frank Watson, Bishopville

Little Pee Dee State Park, LaFon Norton, Dillon

Myrtle Beach State Park, T. F. Barbie, Jr., Myrtle Beach

Oconee State Park, James W. Ray, Walhalla

Paris Mountain State Park, Ed. H. Miller, Greenville

*Pleasant Ridge State Park, LeRoy Smith, Cleveland

*Poinsett State Park, F. Marion Dwight, Wedgefield

Rivers Bridge State Park, E. B. Mobley, Ehrhardt

Santee State Park, G. B. LaBoon, Santee

* Includes area for Negroes.

Sesqui-Centennial State Park, Marshall D. Holder, Columbia
 Table Rock State Park, Robert G. Jones, Pickens
 Colleton Wayside Park, Willard Risher, Canadys

State Park Advisory Committee

J. D. Carroll	Harry R. E. Hampton
Lexington	% The State Newspaper
Cecil D. McDaniel	Columbia
Box 347	Thomas Moore Craig
Beaufort	Moore
Wayne Freeman	Bennet Moore
Greenville News	Cheraw
Greenville	Mrs. Bradley Morrah
Harold A. Petit	212 Overbrook Rd.
S. C. Electric & Gas Co.	Greenville
P. O. Box 952	Mrs. Jack Bryant
Charleston	Orangeburg

DIVISION OF FORESTRY

Branch of Administration

E. B. Price, Assistant State Forester
 C. H. Nelson, Head, Fiscal and Accounting
 Delford F. Furney, Head, Property and Supply
 Virginia S. Holmes, Head, Personnel and Office Services
 Warehouse, Sumter
 J. P. Watson, Warehouseman

Branch of Information and Education

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 Claude F. Barden, Information and Education Assistant
 Nelson L. Peach, Information and Education Assistant
 Sign and Woodworking Shop, Sumter
 Olin M. Ballentine, Foreman

Branch of Forest Management

E. C. Pickens, Assistant State Forester
 Howard R. Scott, Management Assistant
 E. L. Middleswart, Management Assistant
 Sand Hills State Forest, Patrick
 Randolph B. Lee, Director
 Manchester State Forest, Wedgefield
 Robert N. McCombs, Director

Branch of Nurseries

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 Horace L. Tilghman Nursery, Wedgefield
 L. M. Staley, Nurseryman
 Piedmont Nursery, Pickens
 E. W. Cooler, Jr., Nurseryman
 Coastal Nursery, St. George
 C. Hampton Durr, Nurseryman
 Ridge Nursery, Trenton
 David D. Brown, Nurseryman

Branch of Forest Fire Control

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 J. T. Hance, Fire Control Assistant
 John M. Shirer, Fire Control Assistant
 Hugh M. Westbury, Fire Control Assistant
 J. M. Geddings, Assistant, Fire Control Communications
 R. M. Littlejohn, Assistant, Fire Control Communications
 Equipment and Repair Shop, Sumter
 O. P. Woodward, Supervising Mechanic

District Offices

Chauncey R. Nichols, District Forester, Camden
 R. B. Rhett, Forester, Camden
 Daniel D. Riddick, Forester, Camden
 H. Gilbert Brown, Forester, Camden
 Edgar L. Dallery, Forester, Sumter
 W. O. Morgan, District Ranger, Camden
 (Camden District includes counties of: Chesterfield,
 Kershaw, Lancaster, Lee, Richland and Sumter)
 Alvin E. Kunz, District Forester, Florence
 Kenneth G. Clemens, Forester, Florence
 John R. Allison, Forester, Conway
 E. G. Lambrecht, Forester, Florence
 Jack F. Young, Forester, Bennettsville
 C. F. Moore, II, Forester, Florence
 Fred W. Watson, Jr., District Ranger, Florence
 (Florence District includes counties of: Darlington, Dillon,
 Florence, Horry, Marion and Marlboro)
 Fred W. Horn, District Forester, Kingstree
 Robert J. Gould, Forester, Kingstree
 Maurice C. Coleman, Forester, Kingstree

John R. Grubbs, District Ranger, Kingstree
(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown and Williamsburg)

John E. Graham, District Forester, Newberry
Donald W. Horton, Forester, Greenwood
W. B. Lawrence, Jr., Forester, Newberry
Wilbur H. Reames, Forester, Newberry
Clifton T. Carter, Timber Marker, Chester
R. L. Hagwood, Jr., Forester, Newberry
Melton Wall, District Ranger, Newberry
(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

Marvin T. Gaffney, District Forester, Orangeburg
Robert C. Simmons, Forester, Orangeburg
C. C. Canada, Forester, Lexington
James A. Miller, Forester, Orangeburg
Wray E. Freeman, Forester, Orangeburg
Robt. E. Beach, Forester, Orangeburg
Joel I. Canada, Forester, Orangeburg
Adrian Lee Pardue, District Ranger, Aiken
(Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington, and Orangeburg)

W. M. Lindsey, District Forester, Spartanburg
Ralph W. Evans, Forester, Pickens
J. Harlan McLees, Forester, Spartanburg
Legare M. Duke, Forester, Spartanburg
John W. Little, Forester, Walhalla
C. W. Nuite, Forester, Pickens
Chas. E. Turpin, District Ranger, Spartanburg
(Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

C. C. Rountree, Jr., District Forester, Walterboro
Paul B. Carson, Forester, Walterboro
Phil A. Hadaway, Jr., Forester, Walterboro
Oscar R. Sampson, Forester, Walterboro
E. H. Benton, District Ranger, Walterboro
(Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton and Jasper)

Protection Units

Abbeville Unit Ranger, Charlie Shaw, Lowndesville
Aiken Unit Ranger, J. Ramie Yonce, Aiken
Allendale Unit Ranger, W. W. Brunson, Allendale
Anderson Unit Ranger, John E. Embler, Anderson
Bamberg Unit Ranger, P. H. Cave, Olar
Barnwell Unit Ranger, W. R. Moore, Barnwell
Beaufort Unit Ranger, W. Heyward Graves, Beaufort
Berkeley Unit Ranger, C. L. Wyndham, Moncks Corner
Calhoun Unit Ranger, Hampie F. Ott, St. Matthews
Charleston Unit Ranger, J. I. Garvin, Charleston
Cherokee Unit Ranger, B. T. White, Gaffney
Chester Unit Ranger, J. Gill Simpson, Chester
Chesterfield Unit Ranger, W. M. Smith, Chesterfield
Clarendon Unit Ranger, Elliott E. Rose, Manning
Colleton Unit Ranger, Glenn B. Britt, Walterboro
Darlington Unit Ranger, Alton Yarborough, Darlington
Dillon Unit Ranger, Ernest S. Oliver, Dillon
Dorchester Unit Ranger, Carlisle Haskell Durr, St. George
Edgefield Unit Ranger, S. G. Reel, Edgefield
Fairfield Unit Ranger, R. E. Patrick, Winnsboro
Florence Unit Ranger, Hugh Cusaac, Florence
Georgetown Unit Ranger, Laurin T. Sessions, Georgetown
Greenville Unit Ranger, G. G. Paris, Greenville
Greenwood Unit Ranger, James C. Smith, Jr., Greenwood
Hampton Unit Ranger, Buddy Waldo Hiers, Varnville
Horry Unit Ranger, James T. Jones, Conway
Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland
Kershaw Unit Ranger, L. E. Smith, Camden
Lancaster Unit Ranger, A. A. Plyler, Lancaster
Laurens Unit Ranger, Thos. F. Hill, Laurens
Lee Unit Ranger, E. A. Hall, Bishopville
Lexington Unit Ranger, V. S. Bickley, Lexington
Marion Unit Ranger, Hoyt Collins, Marion
Marlboro Unit Ranger, Jesse Adams, Jr., Bennettsville
McCormick Unit Ranger, G. L. Sharpton, McCormick
Newberry Unit Ranger, Marvin E. Wilson, Newberry
Oconee Unit Ranger, D. O. Morgan, Walhalla
Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg
Pickens Unit Ranger, C. H. Gravely, Pickens

Richland Unit Ranger, T. W. Cooper, Columbia
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda
 Spartanburg Unit Ranger, Milton E. McMillin, Spartanburg
 Sumter Unit Ranger, L. G. Cabbage, Sumter
 Union Unit Ranger, James G. Long, Union
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree
 York Unit Ranger, E. G. Foster, York

COUNTY FORESTRY BOARD MEMBERS

June 30, 1960

Abbeville—

John C. Gilliam, Calhoun Falls
 Reid Ashley, Rt. 2, Iva
 W. L. Bowman, Rt. 3, Box 232, Iva
 J. M. Kirkpatrick, RFD, Donalds
 Sam W. Sherard, Rt. 3, Abbeville

Aiken—

K. C. Byars, Windsor
 George Wilson, Bath
 Grady McElmurray, Rt. 4, N. Augusta
 J. C. Jones, Rt. 4, Aiken
 George Townes, Jr., Aiken

Allendale—

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 J. J. Snelling, Millett
 Joseph I. Chapman, Luray
 W. B. Manuel, Fairfax
 J. V. Spigener, Sr., Allendale

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I. Fleet McClain, Anderson
 W. J. Prater, Rt. 1, Townville
 J. C. McMillan, Rt. 4, Honea Path
 J. P. Bond, Rt. 3, Iva
 J. W. Merritt, Jr., Box 307, Rt. 4, Easley

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 Harold Kearse, Olar
 Jack C. Kirkland, Bamberg
 Herbert Rhoad, Rt. 1, Branchville
 John A. Turner, Denmark

Barnwell—

Chas. G. Youngblood, Box 114, Barnwell
 Ansel Still, Hilda
 W. E. Anderson, Box 393, Williston
 S. G. Lowe, Blackville
 Dean Rountree, Marlboro St., Barnwell

Beaufort—

Ernie Bell, Bluffton
 R. G. Mitchell, Box 95, Beaufort
 W. A. Campbell, Sheldon
 Richard Wisner, Ladies Island, Beaufort
 Charles Ulmer, Jr., Bluffton

Berkeley—

Algie H. Kennedy, Moncks Corner
 Charles Marion, Pineville
 Herbert Cross, Cross
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 D. L. Bradwell, Huger

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 Raymond R. Hill, Gaston
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 J. B. Leland, Mt. Pleasant
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 DeWitt King, Sr., 92 Broad St., Charleston
 W. J. Newton, Yonges Island

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 W. A. Gettys, Gaffney
 W. Joe MacArthur, Gaffney
 W. T. Hollifield, Kings Creek
 C. F. Blackwell, Gaffney

Chester—

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 Clyde C. Cornwell, Rt. 3, Chester
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Chesterfield—

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 Clyde K. Laney, Cheraw

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 Douglas McFaddin, New Zion
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 S. A. Cooler, Walterboro
 H. M. Kinsey, Walterboro
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 E. A. Boynton, Jr., Walterboro

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 Leon Watkins, Hartsville
 Roland Warr, Rt. 3, Darlington
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 H. N. Cousar, Latta
 James R. C. Calhoun, Dillon
 D. L. McInnis, Rt. 1, Little Rock

Dorchester—

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 Dr. R. V. Ackerman, Ridgeville
 Evans Salisbury, Summerville
 Albert Judy, Reevesville
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Edgefield—

C. Earle Johnson, Modoc
 R. C. Bledsoe, Rt. 3, Edgefield
 Sam Slade, Edgefield
 H. Frank Cooper, Rt. 3, Augusta, Georgia
 Wm. D. Herlong, Johnston

Fairfield—

Reid Long, Strother
 John McFadden, Ridgeway
 Marion Frazier, Strother
 Henry Johnson, Winnsboro
 W. T. Glenn, Jenkinsville

Florence—

W. D. Boling, Pamplico
 D. L. Brown, 341 Greenway Dr., Florence
 F. H. Poston, Pamplico
 Jas. H. McElveen, Timmons ville

Georgetown—

L. T. Easley, Georgetown
 J. T. Maynard, Georgetown
 Clarence L. Newton, Sr., Rt. 2, Box 57, Andrews
 Richard L. Allston, Pawleys Island
 H. H. Flickinger, Georgetown

Greenville—

M. L. Jarrard, Cleveland
 J. H. Kellett, Rt. 3, Belton
 S. B. Huff, Piedmont
 G. Dewey Butler, Travelers Rest
 Ansel Alewine, Taylors

Greenwood—

E. W. Milford, Greenwood
 John Bowen, Troy
 A. C. Byrd, c/o Abney Mills, Greenwood
 J. McD. Kinard, Ninety Six
 Eldred S. Tinsley, Hodges

Hampton—

Sidney Linto, Box 191, Estill
 Vernon C. Sauls, Hampton
 R. C. DeLoach, Furman
 Howard P. Rhodes, Estill
 Lloyd Rivers, Hampton

Horry—

Hicks Huggins, Rt. 4, Nichols
 Lee Outlaw, Rt. 1, Myrtle Beach
 T. A. Smart, Rt. 2, Conway
 Allard Strickland, Rt. 1, Loris
 Darewood Strickland, Rt. 2, Tabor City, N. C.

Jasper—

J. Hoyt Langford, Ridgeland
 Wallace Goethe, Tillman
 J. Ivey Wells, Coosawhatchie
 George Roberts, Pineland
 B. J. Berry, Ridgeland

Kershaw—

Richard W. Lloyd, 1707 Lyttleton St., Camden
 John Bowers, Kershaw
 A. B. McLaurin, Bethune
 Bentley R. Stogsdill, Boykin
 C. W. Wooten, Blaney

Lancaster—

Frank Blackwell, Rt. 2, Jefferson
 Harold Richardson, Rt. 1, Lancaster
 Carl W. Mullis, Lancaster
 W. G. Hance, Heath Springs
 Charlie V. Morris, Rt. 3, Heath Springs

Laurens—

Allen Marler, RFD, Fountain Inn
 J. Y. Martin, Ware Shoals
 J. T. Hollingsworth, Cross Hill
 Tan M. Ray, Clinton
 Elmore G. Bramlett, RFD, Laurens

Lee—

B. B. Davis, Oswego
 Grady Skinner, Rt. 2, Lamar
 Robert D. Pate, Rt. 2, Cassatt
 S. E. McElveen, Sr., Lynchburg
 M. E. Carter, Sr., Elliott

Lexington—

J. D. Carroll, Lexington
 Harper Shull, West Columbia
 Berley V. Shealy, Leesville
 Preston G. Freshley, Rt. 2, Columbia
 L. O. Rast, Swansea

Marion—

T. C. Atkinson, Rt. 1, Mullins
 A. H. Turbeville, Mullins
 Marion J. Carter, Marion
 B. B. Baker, Centenary
 A. M. Flowers, Marion

Marlboro—

Brooks Usher, Bennettsville
 Colin McLaurin, Bennettsville
 R. M. Pegues, Rt. 4, Bennettsville
 C. D. Napier, Blenheim
 H. W. McDonald, McColl

McCormick—

G. J. Sanders, McCormick
 J. T. Creswell, Rt. 3, McCormick
 W. L. White, Rt. 2, McCormick
 J. C. Winn, Plum Branch
 Manly Willis, Rt. 1, McCormick

Newberry—

J. Cecil Berly, Pomaria
 Chas. C. Wallace, Rt. 3, Newberry
 H. M. Hentz, Box 181, Newberry
 A. W. Murray, Newberry
 T. J. Abrams, Whitmire

Oconee—

Oscar Wigington, Salem
 W. H. Pelfrey, Rt. 2, Seneca
 Henry Miller, Westminster
 R. A. Reeves, Seneca
 B. W. Alexander, RFD, Westminster

Orangeburg—

Martin Cope, Cope
 George H. Priester, Neeses
 J. Nat Miley, Branchville
 M. H. Whetsell, Orangeburg
 L. E. Miller, Holly Hill

Pickens—

T. A. Bowen, Pickens
 W. M. Ponder, Dacusville
 J. Edd Gilstrap, Dacusville
 J. H. Bolding, Rt. 2, Pickens
 Furman Chastain, c/o Poinsett Lbr. & Mfg. Co., Pickens

Richland—

J. M. Bates, Wateree
 Lonnie B. Nelson, Rt. 3, Columbia
 J. Roger Wilson, Blythewood
 E. B. Wingard, 3042 Broad River Rd., Columbia
 L. W. Conder, Box 693, Columbia

Saluda—

A. R. Able, Saluda
 M. H. Kemp, Johnston
 C. M. Forrest, Johnston
 J. Claude Wheeler, Saluda
 R. L. Hipp, Saluda

Spartanburg—

Tom Moore Craig, Montgomery Bldg., Spartanburg
 Paul Hendrix, Duncan
 W. J. Martin, P. O. Bldg., Spartanburg
 Claude Bishop, Inman
 Warren Dillard, Cross Anchor

Sumter—

A. J. Hatfield, Sumter
 Hugh M. McLaurin, Jr., Wedgefield
 Curtis Edens, Dalzell
 H. Fox Tindal, Pinewood
 Albert Moore, Rt. 1, Olanta

Union—

A. T. Inabinett, Buffalo
 C. Lynell Gregory, Rt. 1, Buffalo
 Seth Garner, Rt. 4, Union
 James A. Berry, Union
 T. Stokes Adams, Union

Williamsburg—

T. V. Ligon, Lanes
 W. W. McCullough, RFD, Hemingway
 T. E. Salters, Salters
 Jack McFaddin, Cades

York—

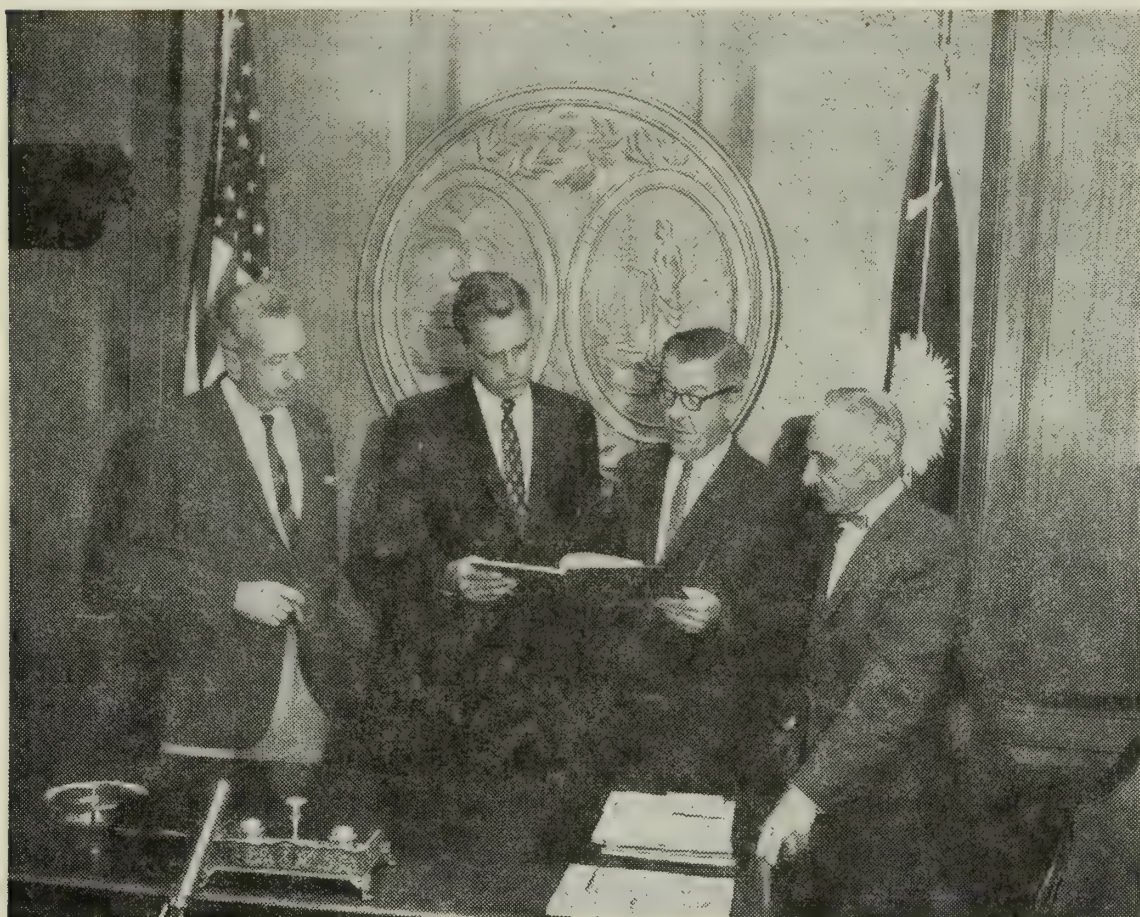
John M. Foster, York
 Oliver C. Faris, Catawba
 Sewell Hartness, Sharon
 Oscar Hammond, Fort Mill
 R. S. Flanagan, Bowling Green

INTRODUCTION

SOUTH CAROLINA'S TIMBER

Factual, detailed information about South Carolina's forest resources is needed for guiding the development of forest industries in South Carolina, and in planning forestry efforts to realize the full potential of South Carolina's forest resources.

Detailed surveys to determine the status of South Carolina's timber resources were made in 1936, 1947 and 1958. The findings in these surveys are used by the Commission of Forestry to determine necessary programs of action to insure the continued production of South Carolina's timber resources. These surveys were made by the Southeastern Forest Experiment Station of the U. S. Forest Service, with the cooperation of the S. C. State Commission of Forestry and a number of South Carolina's forest industries. The report on the 1958 survey was published in 1960.



A bound copy of "South Carolina's Timber", Forest Survey Release No. 55, is presented to Governor Ernest F. Hollings for study and information. Pictured above left to right are: Cam Niederhof, Chairman of the Legislative Forestry Study Committee; Governor Hollings; Thomas Lotti, Charleston Research Center of the Southeastern Forest Experiment Station; and C. H. Flory, State Forester.

Comparisons between the recent survey and the two previous surveys reveal significant trends in the state's timber supply. Some of the changes are desirable and reflect substantial improvement in forest practices during the past 22 years. However, many of the changes taking place are not desirable, and emphasize the need for prompt action in several fields.

Although the report shows that total timber volume in the state is increasing, size and quality of the state's timber is decreasing. While timber size and quality have decreased, the need for larger sizes and better quality of both softwoods and hardwoods has increased.

In the light of past trends, the outlook is poor for industries dependent upon large high-quality timber. Adverse effects have already been felt by the lumber industry and the veneer and plywood industry in this state. If past trends continue, and this appears likely unless adequate steps are taken immediately, still further decreases in timber size and quality may be expected.

For industries such as the pulpwood industry that can utilize smaller and low-quality timber, the outlook is much brighter. The supply and growth of both small hardwoods and softwoods is increasing rapidly.

The greatest opportunity for expansion in the wood-using industries field at the present seems to be in the following two categories.

1. There is a need and an opportunity for industries that can further manufacture or process the primary forest products now produced in the state that are being shipped at present to other states for further processing. Value added by manufacture can add substantially to the income from forest products. An outstanding example of this is the furniture industry in North Carolina where the value of the finished product is many times greater than the value of the raw material, wood, that goes into the product.

2. There is a need and an opportunity for wood-using industries that can use species and sizes of timber now in abundant supply but which are not presently being utilized. There is also an opportunity for more complete utilization of the timber being harvested. In 1957 only 45% of the total volume of wood left over from the manufacture of primary forest products was utilized. Economic and technical factors tend to limit more com-

plete utilization of the timber now harvested, but there are opportunities for further improvement in this area.

Over 100,000 small landowners own 77% of the commercial forest land in the state, but over-cutting and reduction in productivity continues on these lands. *This is undoubtedly the number one forestry problem in South Carolina.*

The findings of the recent forest survey bear out the soundness of the overall forestry programs that have been recommended by the Commission of Forestry for more than a decade. In spite of the fact that forests are one of the most valuable resources of South Carolina, growing on six out of every ten acres, and contributing nearly 400 million dollars to the economy of the state each year, the Commission has not had the support necessary to carry out an adequate statewide forestry program that has the potential of ultimately doubling our timber growth. Enumerated below are various problems and proposed action and efforts being made to solve these problems.

1. Further expansion of technical forestry services and assistance is needed. At the present time Commission foresters are giving in-the-woods assistance to some 5,000 woodland owners each year.

Forestry assistance is also provided to South Carolina landowners by private consulting foresters, and by foresters of the pulp and paper industry. However, the amount of technical forestry assistance available to South Carolina landowners is far short of the need.

At the statewide Small Woodland Owner's conference held in Columbia in September 1958, and in recommendations of the legislative Forestry Study Committee, and the State Advisory Committee of County Forestry Boards, increased technical forestry assistance has been named as one of the key needs in solving the small woodland owner problem.

2. Increased activity in forestry information, education and demonstration work is another key need, if present and long-range forestry problems are to be solved and if the potentials of forestry are to be realized. This is a need that affects the small woodland owner problem, the problem of fire occurrence and area burned, the problem of forest management assistance, the problem of forest insects and diseases, the problem of reforestation, the problem of getting research results applied on the

woodlands of the state—in fact, increased information, education and demonstration work is tied to practically every phase of the forestry program in the state.

There has been much valuable forestry information and education work done by the State Commission of Forestry, the Clemson College Extension foresters, individual forest industries in the state (particularly the pulp and paper companies), forest industry associations such as American Forest Products Industries, Inc., and the Southern Pulpwood Conservation Association, as well as by the U. S. Forest Service, the vocational agriculture section of the State Department of Education, and by others. However, much more should be done if further and faster progress is to be made in forestry in South Carolina.

This matter has been considered by many groups, including the Forestry Study Committee of South Carolina, and there is general agreement that much more work is needed along this line.

3. Continued reforestation efforts are needed. According to the recent forest survey report there are more than five million acres of land in the state now completely understocked or insufficiently stocked that should be planted to trees.

The stimulus given to tree planting in the last few years, particularly through the Soil Bank and Agricultural Conservation Program, has provided federal funds to expand nursery facilities in South Carolina from one nursery to four nurseries. The West Virginia Pulp and Paper Company of Charleston has also established a forest tree nursery in recent years, and other pulp companies have brought seedlings into the state from industry nurseries in other states. South Carolina has become one of the leading tree planting states in the country. The Commission's nursery program needs continued support, particularly with the federal subsidies of the Soil Bank Program passing out of the picture, if South Carolina's tree planting program is to be continued at its present high level.

4. Intensification of forest fire prevention and control is needed. Although substantial and gratifying progress has been made since statewide forest fire protection was instituted in 1945-46, additional intensifications are needed to reduce both forest fire occurrence and acreage burned in the state. Large corporate ownerships and other large owners of forest lands in

the state have made great strides in providing intensified fire protection on their lands in addition to the basic fire protection provided statewide by the Commission of Forestry. Little progress has been made on most small forest ownerships, however, in many parts of the state, with the result that fire losses continue to be high on some of these ownerships.

Adequate fire protection is basic to a program of reforestation, good forest management, development and use, and further intensification and improvements in fire protection are needed in South Carolina.

5. The problem of reducing losses from forest insects and diseases is becoming increasingly important. The recent forest survey shows, for example, that mortality reduced gross softwood growth by 26%, and reduced hardwood growth by 45% in 1957. Total volume in pine trees that die throughout the state each year amounts to more than a million cords. Although some loss is natural and inevitable, increasing efforts should be made to reduce losses caused by forest insects and diseases.

6. A step-up in forestry research work at the state level is an important need to develop information and methods for improving the protection, management and use of the timber, wildlife, watershed and recreational resources of our forest land.

South Carolina has lagged far behind neighboring states, and other states in the nation, in the matter of forest research from state-supported funds. There is great potential in forestry research in the fields of utilization and processing, forest genetics and tree improvement, forest management, insect and disease control, etc. Research can open the door to these potentials of increasing our timber growth, improving utilization practices, and generally improving the productivity and profitability of our forest resources. Although some research results are long-term in nature, there is no doubt that forestry research is needed and can pay off handsomely in terms of increased timber growth and production.

7. A program of rehabilitating and developing all state-owned forest lands should be continued. An excellent beginning in this has been made by the authorization granted by the 1960 session of the General Assembly to undertake a rehabilitation program on the two large state forests. Continued support and expansion of this program can pay big dividends to the state.

8. Continued support of the Department of Forestry at Clemson College is urged to provide facilities for educating and training professional foresters to carry out intensified forestry practices in South Carolina in the coming years.

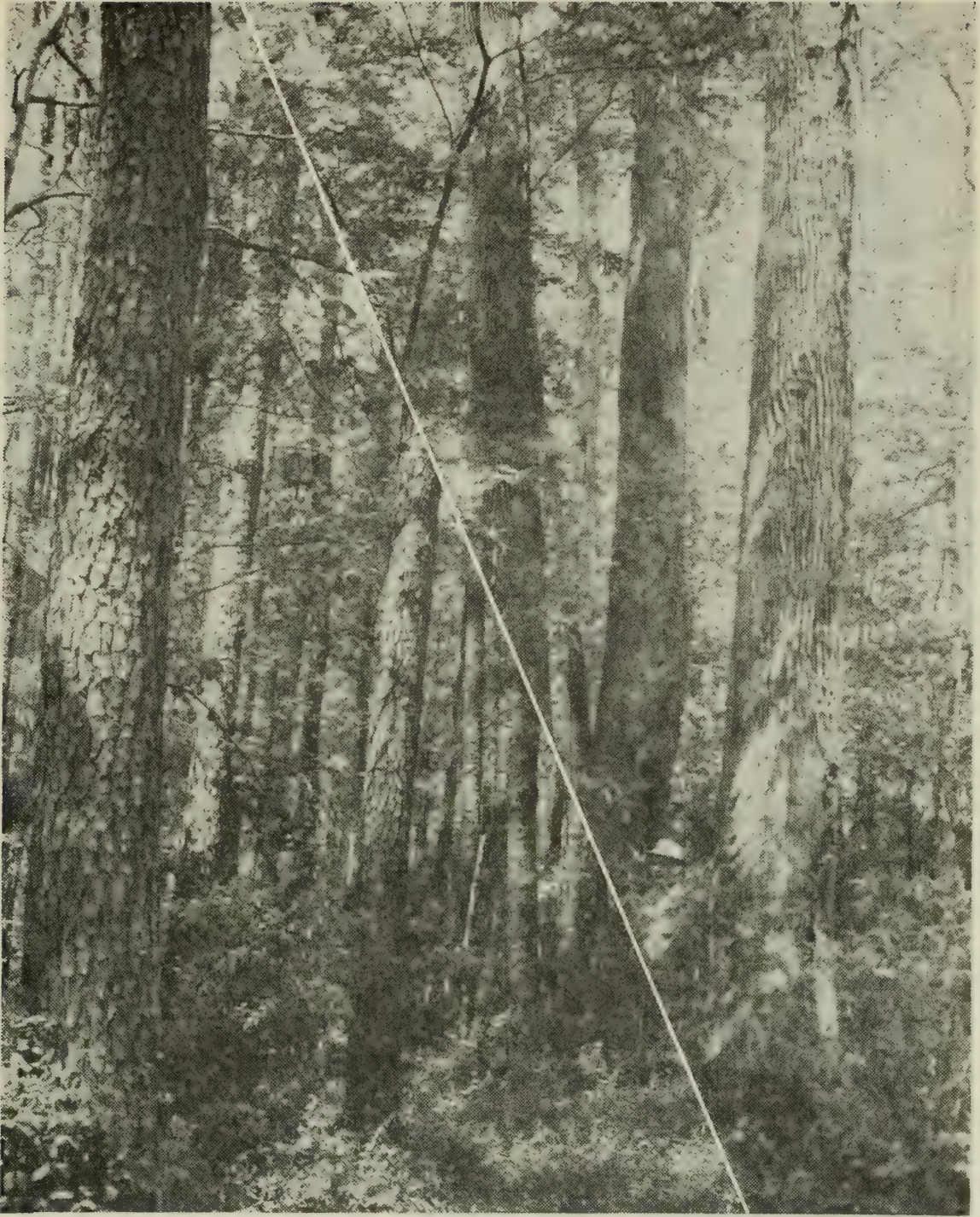
The economy of South Carolina and the people of South Carolina stand to benefit considerably if a forceful and comprehensive program is carried out to develop the forest resources of South Carolina to their fullest potential. The problems pointed out in the recently completed forest survey can help us chart the way for such a program.

If the great potentials of South Carolina's forest resources are to be realized, it is imperative that further efforts be expended now. Only in this way will South Carolina and South Carolinians be rewarded by the full potential of this great renewable natural resource—our forests.

Some Highlights of the Forest Survey

1. Softwood cut increasing—hardwood cut decreasing since 1936. Lumber and pulpwood products up in both softwood and hardwood; however, the big drop in use of hardwood for fuelwood has accounted for the drop. Major softwood increase is due to increased pulpwood production. Hardwood pulpwood production has increased to 22% of the total in 1959; however, this has not offset the loss of fuelwood use compared to 20 years ago.
2. Substantial progress has been made toward more complete utilization of timber cut. In 1957, 45% of the total volume of wood left over from the manufacture of primary forest products was used, mainly for fuel and fiber. Softwoods are utilized much more closely than hardwoods.
3. Decrease in timber size and quality—the volume of softwood growing stock suitable for sawlogs dropped 6% since 1936. The volume of large sawtimber, 15" D.B.H. and larger, dropped 30%.

Hardwood timber has also decreased in size and quality. The volume of large sawtimber size timber dropped 16%. There was an increase of 16% in total hardwood inventory; however, only 8% of this increase is of sufficient quality to make desirable large size hardwood timber.



Timber volumes in the state are increasing yet much effort is needed to improve timber size and quality which is decreasing.

4. The trend shows a speed-up in the shift to smaller and lower quality timber. The build-up of the number of trees in the smaller sizes indicates improvement in fire protection, planting and management. In 1936, 31 million trees annually reached 5.0" D.B.H. In 1957, 54 million trees annually were reaching 5.0" D.B.H.
5. Annual diameter growth rate for hardwood trees decreasing due to hardwoods taking over sites not suitable for their op-

timum growth and failure to thin overcrowded hardwood stands.

Annual diameter growth on softwoods is increasing.

6. Softwood in 1957 shows gain of 32,000 cords per year; however, industry expansion in 1958 and 1959 has accounted for much more increased drain than 32,000 cords. Softwood larger sizes show a heavy overcut; consequently, all softwood supply could be drastically reduced in the next 20 years unless growth can be stepped up. Planting of 150,000 acres annually since 1957 will tend to overcome softwood deficit.
7. Present trends, if continued, will not sustain present industries dependent upon high quality timber. Pulpwood expansions already made in 1958 and 1959 would indicate an overcut of smaller sized softwoods.
8. From 1936 to 1947 the land reverting from cropland to trees was more than 100,000 acres annually. 1947 to 1958 showed this trend to be leveling off with much smaller increases during the past 10 years. The pine timber areas are now showing a decline.
9. Total mortality in pine trees annually amounts to more than one million cords. Salvage of this or part of this volume could add several hundred thousand cords to the annual net growth.
10. The problem adds up to the fact that South Carolina is not growing enough high quality timber to sustain its present industries dependent upon the larger size and quality. South Carolina is just holding its own to provide sufficient amounts of smaller sizes and lower quality pine and has a surplus only in lower quality hardwood timber.

The table below sets up the problems and needs. With proper management, South Carolina can double production of forest products.

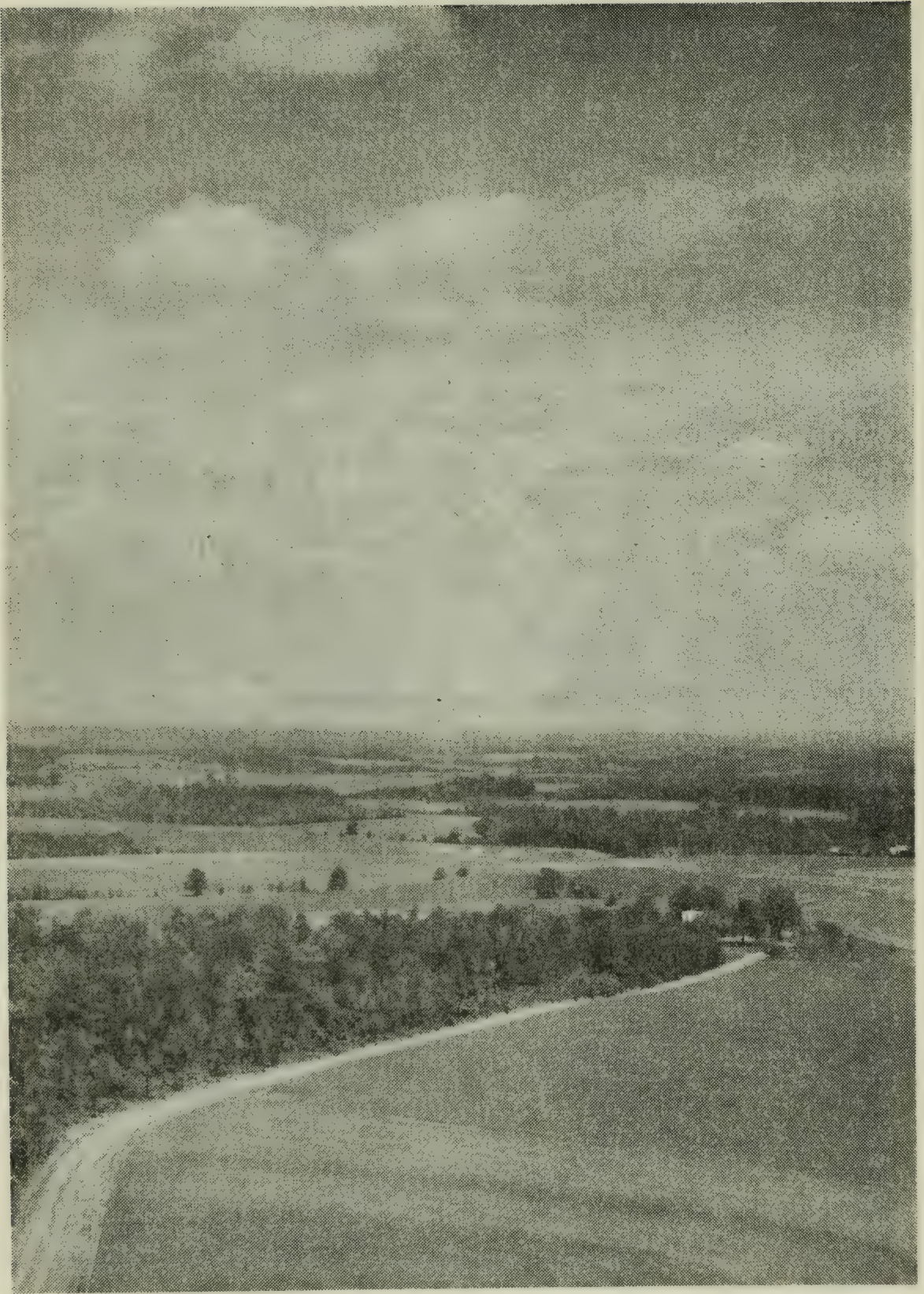
**Commercial Forest Area by Major Type of Action
Needed to Increase Productivity, 1958**

<i>Type of Action Needed</i>	<i>Commercial Forest Area Thousand</i>	
	<i>Acres</i>	<i>Percent</i>
No action needed:		
Pine stands -----	3,443.8	28.8
Hardwood stands -----	1,679.3	14.1
	<hr/>	<hr/>
Total -----	5,123.1	42.9
	<hr/>	<hr/>
Stand improvement:		
Pine stands -----	1,293.1	10.9
Hardwood stands -----	1,518.3	12.7
	<hr/>	<hr/>
Total -----	2,811.4	23.6
	<hr/>	<hr/>
Regeneration to pine:		
Without site preparation -----	458.8	3.8
With site preparation -----	3,541.6	29.7
	<hr/>	<hr/>
Total -----	4,000.4	33.5
	<hr/>	<hr/>
All commercial forest area -----	11,934.9	100.0

In addition to the above, there are 1.4 million acres of idle cropland that could be planted to trees. The total area that needs planting including cutover woodlands without seed source is 5.4 million acres.

11. Owners of small tracts hold the answer. Seventy-seven percent of the commercial forest land is owned by more than 100,000 small owners. The poorest management practices occur on these lands. Public and large private ownerships are in a better productive condition.
12. Small owner tracts accounted for 80% of the softwood cut in 1957. This high rate of cut is further reducing the growing stock and precludes growth of higher quality products on these lands.

NOTE: Copies of the 104-page report, Forest Survey Release No. 55—South Carolina's Timber—are available on request from the Southeastern Forest Experiment Station, Asheville, N. C., or from the S. C. State Commission of Forestry, Box 357, Columbia, S. C.



Over-cutting and decreased timber production on small forest holdings create the number one forestry problem in South Carolina.

FOREST MANAGEMENT

SUMMARY

The Commission of Forestry continued to direct the major part of its forest management program to assisting small private woodland owners with their forest management problems. There are more than 100,000 of these small woodland owners.

The 1958 Forest Survey showed some change in the type of ownership of the woodland areas of the state. Industrial ownerships now control approximately 14% ; all types of public ownership, 9% ; and the small landowners control the remaining 77% of the woodland area. Also, the survey pointed out that the best forest management was being applied on the public, industrial, and larger land ownerships, with the greatest problem or lack of proper forest management existing among the small woodland owners who control 77% of the area.

Technical forest personnel of the State Commission of Forestry offer forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to either improve the stand, maintain it in a productive condition, harvest timber products, or any reforestation work necessary on idle or under-stocked areas.

Five years ago the Forestry Commission had 17 men working full time on this program. They were able to assist about 1,300 landowners with preliminary forest management plans and in addition handle some 800 requests referred to the Commission by the Agricultural Stabilization Committee where forest practices were involved. During 1959-60 Commission foresters wrote 2,015 brief management plans for small landowners and in addition handled approximately 3,000 field inspections in connection with the Agricultural Conservation Program. During 1959-60 the Commission had 24 men devoting full time to the forest management program, including watershed activities which increased from one watershed project to four projects during the last five years. The addition of these seven foresters was made possible by increased federal funds for the Cooperative Forest Management Program, the Watershed Program (Public Law



Advice on weed tree control for timber stand improvement where needed is included in on-the-ground assistance by Commission foresters.

566), the Soil Bank Program, and Agricultural Conservation Program funds.

The present personnel were unable to keep up with requests from landowners for forest management assistance. In some areas requests could not be handled for four to six months after being received. A minimum of four additional men is needed at present just to keep up with requests. This assistance to small woodland owners is one of the most important activities to reach the small landowners with forestry information and assistance.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowners to employ a private consulting forester. Commission foresters also work closely with industry conservation foresters who give direct assistance to landowners.

The Commission has followed the policy of recommending private consulting foresters to be employed by landowners wherever possible. We believe that forestry can and will pay its own way when areas are brought into full production. It is believed that the large number of consulting foresters in South Carolina (42) is one of the primary reasons why South Carolina is one of the more progressive states in the nation in forest management. The Commission will continue its policy of encouraging the employment of consulting foresters on all properties where the cost to employ a consultant will be justified. Commission foresters will continue to concentrate their activities to promote interest among small landowners in doing better management work and in direct assistance to those with small timber areas.

The Commission experienced a very small turnover of technical personnel during the year. There was some lost time due to military service commitments; however, the efficiency in general was above average due to the stable employment.

During the year Commission foresters made woodland examinations on 2,015 separate woodland areas covering 230,691 acres. A total of 19,920,743 board feet of sawtimber and 9,432 cords of pulpwood was marked on 521 tracts. This was a new high in the number of examinations made and the number of marking jobs accomplished. In addition, 310 landowners were referred to consulting foresters and 100 landowners referred to industry foresters. These were primarily from the larger properties examined.

Landowners continued to receive excellent prices for selectively marked sawtimber and pulpwood. A more detailed discussion of this may be found in the next few pages of this report.

The three-way agreement for cooperative control of forest insects and disease between Clemson College, the U. S. Forest Service, and the Commission of Forestry was continued. Clemson has employed a Forest Entomologist and Pathologist and will plan and coordinate protection and control activities. The Forestry Commission will assist in detection and control, coordinating its activities with Clemson College. The U. S. Forest Service will also assist both with federal funds and technical personnel as conditions warrant.

Clemson College, through its technical staff, has expanded its research efforts on forestry. The Commission is already working with Clemson on a number of nursery and management research studies. Other projects are being discussed and will be undertaken in 1960-61.

There were four active small watershed projects operated during 1959-60. One additional project, the Huff Creek Area in Greenville County, has been approved and will begin operation in 1960-61. The Commission of Forestry is responsible for all technical forestry work on these watershed areas, including tree planting on critically eroded areas.

Working agreements were completed with an additional number of the state's Soil Conservation Districts, bringing the total to 34 agreements now signed. Only eleven Soil Conservation Districts do not have a working agreement at present. It is expected that these agreements will be completed within the next few months.

The State Commission of Forestry continued to operate four state forests. The combined area of these state forests represents about one per cent of the total forest area in the state. Experimental and demonstration plantings, forest management experiments and other activities were continued on these forests. Since about 35% of the total land area in the state forests is still in an unproductive state, major emphasis continued to be directed toward reforesting this non-productive area. A total of 651 acres of scrub oak land was cleared during the year and has been, or will be, planted to pine. During the past ten years a total of some 6,378 acres of state forest lands has been cleared of worthless scrub oak and converted to pine stands.

The 1960 Legislature passed an act enabling the Forestry Commission to use state forest receipts to rehabilitate approximately 40,000 acres of scrub oak lands on Manchester and Sand Hills State Forest. This program is to be completed in five to seven years and will result in considerable financial returns to the State of South Carolina. This act will enable the Forestry Commission to overcome the major problem of forest management now existing on the state forests.

MANAGEMENT ASSISTANCE

The major emphasis of the Forest Management Branch activities was again directed toward assisting private landowners with their woodland management problems.

Foresters of the State Commission of Forestry and the Clemson College Extension Service cooperate in helping landowners manage their timber lands.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowners with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is fifty cents per thousand board feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seedbed preparation, control of the "Brown Spot" Disease in longleaf pine, and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis, with the landowner, of the forest conditions so that



During the year Commission foresters examined and gave recommendations on a record total of 2,015 tracts containing 230,691 acres of forest land.

probable damages of prescribed fire can be compared with expected benefits.

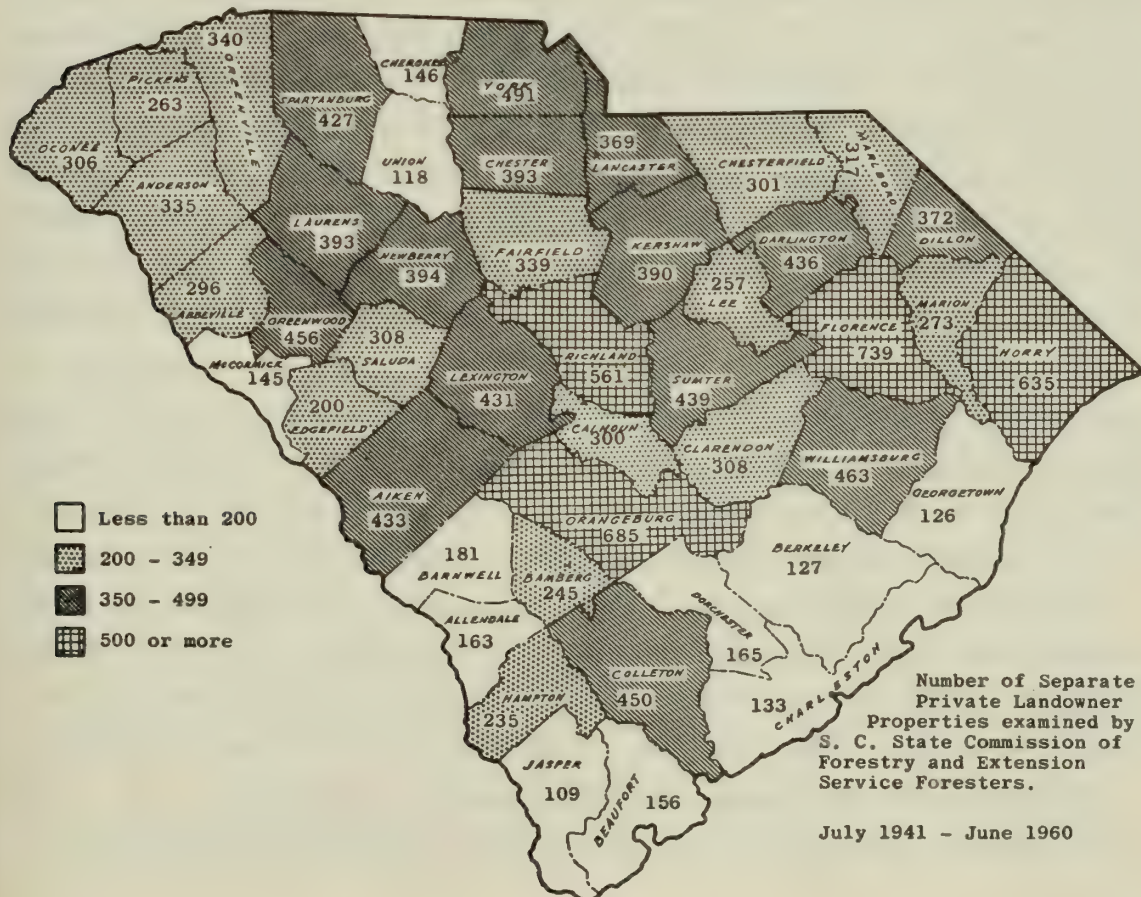
In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and district office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,000 telephone calls regarding insect and disease control and made more than 260 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

During the year Commission foresters made 2,015 examinations on 230,691 acres of forest land, and selectively marked 19,920,743 board feet and 9,432 cords for 521 landowners on 17,936 acres of forest land. The following table shows the continuous increase in woodland examinations and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature. The number assisted this year is the largest number ever assisted in one year.

FOREST MANAGEMENT ASSISTANCE

Summary By Years

	Examinations & Recommendations		Timber Marking		Cords Pulp-wood
	No. of Land-owners	Woodland Acreage	No. of Land-owners	Woodland Acreage	
1941-42	213	37,500	84	14,792	862
1942-43	145	62,204	59	8,769	1,231
1943-44	170	85,300	121	15,407	639
1944-45	309	161,412	108	15,359	546
1945-46	256	80,800	78	12,591	4,237
1946-47	445	105,896	203	18,408	3,500
1947-48	545	148,577	208	13,477	4,429
1948-49	706	126,600	235	13,768	3,385
1949-50	880	163,334	242	8,427	3,896
1950-51	998	173,057	339	14,275	3,089
1951-52	919	170,948	288	11,931	3,935
1952-53	931	142,054	315	12,109	8,467
1953-54	945	143,347	331	8,864	5,162
1954-55	1,166	184,754	399	9,477	9,167
1955-56	1,322	191,143	393	10,973	6,008
1956-57	1,148	163,479	304	8,248	7,881
1957-58	1,423	208,821	394	12,305	6,419
1958-59	1,693	196,529	403	14,374	9,432
1959-60	2,015	230,691	521	17,936	
Totals	16,229	2,776,446	5,025	241,490	82,285



Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to destroy the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees. This cull tree removal program is probably the largest single forest management problem facing South Carolina woodland owners. Commission foresters will continue to place more emphasis on this problem.

There was some increase in the number of Agricultural Conservation Program referrals. Field foresters of the Commission are responsible to check all areas where landowners request forest practices to be carried out on their property under the Agricultural Conservation Program. I have listed below the number of properties approved for various practices and the acres of forest practices accomplished under this program for 1959.

Tree planting	2,267 landowners	43,911 acres planted
Clearing brush land and planting....	629 landowners	18,088 acres
Improvement of a stand of trees ...	288 landowners	15,795 acres
Construction of firebreaks	410 landowners	10,276,000 linear feet

Commission foresters were unable to service all of the requests from landowners. The tremendous increase in requests to assist landowners with clearing scrub oak land, timber stand improvement work or cull tree control, tree planting, etc., plus an increase in requests for sawtimber and pulpwood marking, has resulted in many requests not being handled for three to six months after being received. Some landowners do not wait to receive the assistance and consequently, poor management practices result. A minimum of four foresters is needed at present to just keep up with present requests for service from small woodland owners.

Commission foresters and Extension foresters continued to follow the practice of referring all larger jobs and some of the smaller jobs to consulting foresters and industry foresters wherever practical. Our records indicate 220 jobs referred to consulting foresters where properties were examined by Commission or Extension foresters, and it is estimated that about 90 additional jobs were referred directly to consulting foresters where original contact was made by Commission or Extension personnel. One hundred jobs were referred to industrial foresters.

Stumpage prices received from marked sawtimber and pulpwood for the past five years are shown in the following table:

SAWTIMBER AND PULPWOOD STUMPAGE PRICES FOR SOUTH CAROLINA—FIVE YEAR PERIOD

Fiscal Year	Weighted Average Stumpage Price Per M Bd. Ft.	Weighted Average Stumpage Price Per Standard Cord
1954-55 -----	\$32.50	\$4.09
1955-56 -----	35.91	4.89
1956-57 -----	37.37	5.49
1957-58 -----	35.72	5.86
1958-59 -----	37.00	5.75
1959-60 -----	39.22	6.76

Timber prices remained good during most of the year with a slow down in demand noted in May and June. This is a reverse of the usual trend. High quality sawtimber continued to bring premium prices. The average price for marked sawtimber was the highest on record. Also, average pulpwood prices for pine pulpwood was the highest on record. Landowners who sold without forestry assistance generally received much less for their timber and, in addition, their cut-over woodland was left in a more unproductive condition.

Overall production of pine pulpwood in 1959 was almost identical to the 1958 production. The amount of chips from saw-mill residue continued to increase. Demand for poles remained about the same and there was little variation in prices paid. Demand for fence posts continued steady; however, most commercial sales for fence posts is limited to a small number of counties.

Lumber Production in South Carolina, 1936 to 1959
(In Million Board Feet)

<i>Year</i>	<i>Softwoods</i>	<i>Hardwoods</i>	<i>Total</i>
1936	610.2	169.8	780.0
1937	572.6	167.4	740.0
1938	577.1	182.9	760.0
1939	643.5	200.5	844.0
1940	682.3	190.2	872.5
1941	879.9	231.0	1,110.9
1942	886.3	196.9	1,083.2
1943	800.3	200.9	1,001.2
1944	708.0	194.1	902.1
1945	550.6	176.1	726.7
1946	748.5	245.0	993.5
1947	685.7	185.4	871.1
1948			
1949	636.7	167.4	804.1
1950	719.8	231.6	951.4
1951	678.0	234.8	912.8
1952	722.0	236.0	958.0
1953	705.0	216.0	921.0
1954	626.0	190.9	816.9
1955	621.0	201.0	822.0
1956	628.0	199.0	827.0
1957	650.0	245.4	895.4
*1958	630.0	220.0	850.0
*1959	650.0	220.0	870.0

* Estimated.

Veneer cut in South Carolina adds up to about 150 million board feet annually. Poles and piling and cooperage amount to approximately 40 million board feet annually.

Round Pulpwood Production in South Carolina, 1936 to 1959
(In Thousand Cords)

<i>Year</i>	<i>Pine</i>	<i>Hardwood</i>	<i>Total</i>
1936	35.8	12.8	48.6
1937	364.4	29.3	393.7
1938	362.7	21.6	384.3
1939	533.6	17.0	550.6
1940	602.8	67.5	670.3
1941	744.0	55.5	799.5
1942	863.0	44.2	907.2
1943	954.0	32.6	986.6
1944	1,010.0	43.5	1,053.5
1945	823.8	53.7	877.5
1946	909.2	112.8	1,022.0
1947	862.6	85.7	948.3
1948	1,000.1	108.4	1,108.5
1949	913.5	98.7	1,012.2
1950	1,068.6	113.8	1,182.4
1951	1,105.2	145.8	1,251.0
1952	1,132.5	143.2	1,275.7
1953	1,273.4	172.8	1,446.2
1954	1,160.5	170.4	1,330.9
1955	1,268.7	244.6	1,513.3
1956	1,582.9	223.7	1,806.6
1957	1,384.7	270.3	1,655.0
1958	1,346.3	246.4	1,592.7
1959	1,342.1	367.8	1,709.9

There were no new large swamills located within the state during the year. Mills requiring large logs and high quality veneer logs are finding it more difficult to locate suitable standing timber. As pointed out under the Survey Section of this report, the average size sawlog has been gradually decreasing during the past 20 years.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired either full or part-time foresters.

The pulp companies continued to furnish the services of their foresters to assist landowners with proper thinning of pulpwood. It is the responsibility of these foresters to help sell private owners on the idea of "sustained yield" in managing their woodlands. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

Commission foresters in the field offices and in the central offices checked in the field approximately 260 properties for insect and disease damage. Recommendations were given the owners regarding treatments necessary to control or check the spread of the diseases or insects. More than 1,000 telephone calls were answered regarding insect or disease where no field check was necessary. There were no epidemics of disease or insects reported anywhere in the state. A small outbreak of Southern Pine Beetle occurred in the northwest corner of the state, mostly confined to National Forest timberland areas. The State Crop Pest Commission treated one heavily infested area on private land.

The working agreement between the State Crop Pest Commission and the Commission of Forestry was continued.

COOPERATIVE FOREST MANAGEMENT

During the year, 15 Cooperative Forest Management Projects were operated in the state. One of these projects had an additional man for most of the year, making 16 foresters working full time on forest management assistance to private owners under this Cooperative Federal Program. The demand by private owners for services offered by these men was greater than could be met during the year. A minimum of four new men is needed now just to keep up with requests that are being received. A summary of the work accomplished by these Cooperative Forest Management Foresters is included in the forest management assistance tables shown in this report. The total technical man years devoted to forest management activities, including Cooperative Forest Management, Agricultural Stabilization funds,

Conservation Reserve Program and the Watershed Program, was 25.8.

WATERSHED PROJECTS

A program to control water on the small watersheds and to protect from overflow the bottomland along the smaller streams was initiated some years ago through Public Law 566. The Soil Conservation Service and U. S. Forest Service are the primary action agencies for this program. The U. S. Forest Service has transferred their responsibilities to the S. C. State Commission of Forestry through an agreement. There are three Public Law 566 projects in operation in the state and the Pilot Watershed Project is being continued.

There have been preliminary examinations on 21 separate areas to determine the feasibility of beginning new watershed improvement works on these areas. One new project (the Huff Creek Area) was set up for action during 1960-1961. A statement follows describing some of the activities accomplished on the four areas in operation.

TWELVE MILE CREEK

The Pilot Watershed on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the U. S. Forest



Pines planted on an eroded hillside soon stop the erosion and stabilize the soil.

Service and the Soil Conservation Service. A total of 300,000 seedlings was planted on 348.5 acres of badly eroded and gullied land within the project boundaries. A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover could be established. In addition to this work, the project forester assisted eight landowners in properly marking and selling sawtimber and pulpwood. A total of 163,000 board feet of sawtimber and some pulpwood was marked for these eight owners. A total of 16 woodland examinations and plans were made for 16 owners. However, many tracts were marked for pulpwood thinning by pulpwood company foresters with the project forester checking the work. In addition, recommendations for planting, brush control and other measures needed on some of the woodland areas were given to a number of landowners. A grand total of 2,851,500 seedlings has been planted on critical areas in this project.

CONEROSS CREEK WATERSHED PROJECT

The Coneross Creek Project completed its third year's operation. The work on this project was under the supervision of R. W. Evans, the same forester who handled the Twelve Mile Creek Project. Woodland management landowner assistance inside the project area was handled by Cooperative Forest Management Forester John Little, who has headquarters at Walhalla.

The Coneross Creek Area is located just west of Walhalla in Oconee County.

Trees were planted on 36 separate farms. A total of 251,000 trees was planted on 280 acres. A total of 16 land examinations was made covering 1,157 acres on the watershed area. Eight marking jobs were completed. With this year's planting, a grand total of 1,954,000 trees has been planted on 1,693 acres.

BRUSHY CREEK WATERSHED PROJECT

The Brushy Creek Project completed the second year's operation. A total of 1,169 brush dams was constructed on 31 landowner properties. These were small check dams to help prevent active erosion and allow trees to become established on these critical areas. A total of 214,300 loblolly pine seedlings was planted on 232 acres of critical area. These trees were planted on 31 separate properties. Two hundred seventy-four acres of trees

were planted by landowners themselves on areas not classified as critical. A grand total of 321,300 seedlings has been planted on 334.6 acres in the past two years. Four woodland examinations and two marking jobs were completed on the watershed area. Additional on-the-ground assistance was given four landowners in making forest products sales. The project forester also assisted in checking properties under the A.S.C. Program and Conservation Reserve Program.

WATEREE CREEK WATERSHED PROJECT

The Wateree Creek Watershed Program got underway in the fall of 1959; however, the accomplishments the first year did not come up to the amount that had been planned. Forty acres were planted to trees on four separate tracts. Twenty-four acres of this were in gullied areas and 16 acres interplanted on partially stocked areas. Twenty-two thousand seedlings were planted. Thirty acres were given some kind of site preparation treatment consisting of mulching, brush or check dams, or fencing.

Four woodland examinations were made on the area; two marking jobs completed; three insect and disease investigations made; and six owners given planting instructions. Two hundred sixty-three thousand trees were planted in the area by landowners on land not classed as critical.

STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

Cassatt State Forest	462 acres
Harbison State Forest	2,202 acres
Manchester State Forest	28,830 acres
Sand Hills State Forest	92,000 acres

TOTAL 123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective continues to be the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops to reduce the competition so that pine will survive and grow. Approximately 6,378 acres of scrub oak land have been cleared and replanted to pine in the past ten years. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.

The 1960 Legislature passed an act enabling the Commission to use receipts from state forests to speed up the reclamation of scrub oak lands. This program should result in some 5,000 to 7,000 acres each year to be reclaimed to production of timber crops. It is expected that approximately 5,000 acres will be cleared during 1960-61 and the entire 40,000 acres of scrub oak lands converted to pine production in less than seven years. This program should result in much higher financial returns to the state through increased production on these state forests. Research and experimental activities have increased during the past two years. A forester was employed to coordinate research activities with other agencies (Clemson College and the Southeastern Forest Experiment Station) and to carry out demonstrations and experimental work as directed by the Commission. Some of the studies underway are:

1. Spacing studies for slash pine
2. Species adaptable to sandy soils
3. Comparison of growth on old fields versus clearings
4. Direct seeding of longleaf pine
5. Furrowing for better survival
6. Geographic seed source comparisons

Detailed reports of activities on each of the state forests follow:

CASSATT STATE FOREST

The area comprising this forest lies about two-and-one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a firetower and dwelling for the towerman was erected. Also a small amount of pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained annually a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property. Fifty-eight thousand slash pine seedlings have been planted in old fields on this property.

During 1958-59, 175.0 acres of scrub oak land were cleared and plowed by Sand Hills State Forest personnel. This land was rented to watermelon planters. Also, during March, 1959, an additional 128 acres of scrub oak land was "pulled down" by Sand Hills State Forest personnel.

The following work was done during the fiscal year 1959-60.

1. 175,000 slash pine seedlings were machine-planted in the 175-acre clearing made during 1958-59.
2. 66 acres of the 128 acres pulled down last year were completely cleared and plowed. The remaining 62 acres will be completed during 1960-61.
3. The following firebreaks were plowed this year. Boundary—6 miles; highway—3 miles; plantation—2 miles; Total—11 miles.
4. Receipts amounted to \$2,534.46 entirely from land rental to watermelon producers.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the fourteen years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a substantial amount to the state treasury. This year's timber sales brought in \$10,431.75 to the state treasury.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939

to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state on June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat and to get all records of transfer completed. A survey has been completed for approximately half of the boundary lines during the last three years. This survey work was temporarily halted during this year due to lack of funds; however, it will be resumed in 1960-61. Approximately one-quarter of this forest is still in an unproductive state. There is need for a tremendous amount of tree planting and other silvicultural activities aimed at building up the productivity of the land. Most of the old fields have been planted; however, only a good start has been made on clearing the scrub oak land and reclaiming it for pine production.

Fire Protection:

Only two fires occurred during the year, burning a total of 9.0 acres. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter unit fire control organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners in the area in the prevention, pre-suppression and suppression of forest fires. The fire record since 1947 has been excellent for Manchester State Forest.

Fish and Wildlife:

Hunting and fishing are handled by a cooperative agreement with the Sumter County Board of Commissioners, which works closely with the Sumter County Game and Fish Association and issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed. State forest personnel plant wildlife food strips and patches with the cost being paid by the Sumter Game and Fish Association.

Agriculture:

Thirty-one tenants rented 948 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, approximately 108 acres of newly cleared scrub oak land were rented for one season to watermelon growers.

Tree Planting:

A total of 452,000 trees was planted on the forest during the year. This total included 54,000 trees on experimental areas. Most planting was done by machine with approximately 60,000 hand planted.

Forest Products Sold and Other Receipts:

Sawtimber—454,674 board feet	\$17,485.00
Pulpwood & Posts—6,412 cords	42,997.96
Rentals & Leases & Misc.	6,785.80
	<hr/>
Total Receipts	\$67,268.76

Silvicultural Practices:

The major silviculture activity continues to be the reclamation of scrub oak areas and establishing pine on these areas. In addition to the complete clearing and planting, some timber stand improvement work was carried out. Also thinnings and improvement cuts were made on a number of tracts.

Under the new program of scrub oak eradication and planting to pine, it is expected that at least 1,000 acres will be cleared during 1960-61.

Clearings made and planted to pine during the period 1949-1959 amounted to 1,989 acres. 1959-1960 clearings and plantings were 245 acres, making the grand total 2,234 acres.

Maintenance and Repair:

Many small maintenance jobs were completed on tenant houses and headquarters buildings. A number of tenant houses are in a bad state of repair and will have to be abandoned within a few years. The forest headquarters buildings and foreman's residence are in good repair.

Some overhaul and repair of equipment was made. Personnel continued to work on equipment changes to increase the efficiency of the scrub oak clearing operation.

Twenty-nine miles of truck trails were machined and washes filled, a number of bridges repaired and ditches cleaned.

Eleven miles of telephone lines in the forest system were brushed and maintained.

Demonstrations and Meetings:

The Manchester State Forest area was used for a training school for all technical personnel at a training school held in May. Also, many of the new foresters were given individual training on the area. Many visitors came to the forest to observe the forestry work being accomplished.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until July 30, 1962. The State Forestry Commission is being paid \$3,074 per year for this lease.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities for the present and for several years to come consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. Almost half of the forest is scrub oak land. The reclamation of this scrub oak land is the major silvicultural objective at the present.

Tree Planting:

All planting was done by machine except for some experimental longleaf planting. All plantings were made in clearings. All the old fields on this forest, except those being farmed, have now been planted to trees. A total of 425,000 slash pine, 101,000 longleaf pine, and 7,000 loblolly pine was planted. A total of 14,580,000 seedlings has been planted on the property since 1935. Approximately two-thirds of these plantings were successful.

Forest Products and Other Receipts:

A total of 2,684 cords of pulpwood and posts and 41,875 board feet of sawtimber and veneer was sold for a total of \$29,879.65. Agricultural land rentals amounted to \$9,882.55, making a grand total of receipts \$39,762.20.

Fire Protection:

During the year 38 fires burned 4,107 acres. One large fire accounted for more than 3,700 acres. The fire plan which was developed for the properties of the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield unit fire control organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

Recreation:

The Sugar Loaf Mountain Recreation area for white people continued to receive heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and latrines provided. The 15 Boy Scout troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing, but no swimming is allowed.

The State Park Division continued improvement work on Campbell's Lake Negro State Park. This area received heavy use during the year.

Fish and Wildlife:

Hunting was allowed on the State Forest portion of the area during the year. Fishing is allowed without permits in Sexton's Pond and Sugar Loaf Mountain Lake. Campbell's Lake is reserved exclusively for colored people. The only regulations are compliance with the state game and fish laws. No hunting is allowed on the wildlife refuge area.

Agricultural Lands:

Fourteen tenants rent and farm 800 acres of agricultural land on the forest. All of the lands which were formerly cultivated

and which were too poor to afford a living for the farmers have been abandoned and have been planted to pine trees. More of this land will be returned to trees.

Silvicultural Practices:

A total of 406 acres of scrub oak was cleared with the brush cutter and/or cable, and plowed with the Athens plow. Since 1947-48 a grand total of 4,144 acres of scrub oak land has been cleared and planted to pine.

Maintenance and Repair:

The Sugar Loaf Mountain Recreation area was maintained and all facilities in the area are in good condition. The general conditions of headquarters and director's residences are good; however, a number of the tenant houses are in need of considerable maintenance work.

Considerable maintenance was necessary on the motor vehicle equipment on the forest. Truck trails, bridges, etc., were maintained.

Boundary Surveying:

No boundary surveying was done this year. This is a job that should be done when funds are available. There are a number of tracts which have not had boundaries definitely established on the ground.

HURRICANE GRACIE DAMAGES TIMBER STANDS IN SOUTH CAROLINA

On September 29, 1959, Hurricane "Gracie" struck the South Carolina coast near St. Helena Sound and moved inland across some heavily-forested areas in Beaufort and Colleton Counties. The storm moved on up through Orangeburg, then north through Columbia and to Charlotte, North Carolina. However, after the storm had passed through Colleton County, it was reduced in intensity and less damage was done to timberlands.

The heaviest areas of damage occurred in the area bounded by Combahee River on the west, Edisto River on the east, and U. S. Highway 17A on the north. Some spots of major damage occurred throughout Colleton and Beaufort Counties and in portions of Charleston and Dorchester Counties.

Immediately following the storm, personnel of the State Commission of Forestry and the Clemson College Extension Service issued publicity requesting the landowners to contact their County Agents or Commission Foresters for assistance to determine what salvage operations would be necessary on their properties. In addition, consulting and industry foresters concentrated their efforts in the hurricane area and a salvage program made excellent progress, considering weather conditions. Commission and Extension Foresters encouraged loggers and sawmill operators anywhere within range of the damaged area to move in and salvage the damaged timber at maximum logging and milling capacities. Pulpwood producers also concentrated their efforts on damaged timber. Extremely heavy rains in October slowed up salvage operations.

In the light of the heavy damage observed by the personnel of the Commission of Forestry, U. S. Forest Service, Extension Service, consulting foresters, industry foresters and the concern which was expressed from many private landowners in the area, it was decided to undertake a survey of the hurricane area to determine more accurately how much and what damage occurred and how much and what salvage could be accomplished. This information was necessary to determine whether other measures were needed to complete more salvage of the damaged timber.

The Commission requested and obtained assistance from the U. S. Forest Service and Extension Service for the purpose of planning and making this survey. The survey was accomplished using a fixed wing plane to fly observation strips at two-mile intervals. Then field crews took ground sample plots along the flight line to convert the general observations into actual figures of damage. The techniques used to make this survey were the first of its kind and proved very successful with a minimum amount of field time.

The total damage was estimated at 492 million board feet and 177,000 cords. By the end of June, 1960, the estimated salvage accomplished was approximately 60 per cent of the total damaged timber. The estimated loss that could not be salvaged exceeds five-and-a-half million dollars.

Periodic checks were made throughout the area of heavy damage during the spring and summer of 1960 to determine if insect activity was building up to epidemic proportion. This did not



Hurricane "Gracie" damaged an estimated total of 492 million board feet of saw-timber and 177,000 cords of pulpwood.

occur and further damage from insects did not cause appreciable loss.

Overall, an excellent job of salvage was accomplished by the forest industries of the state.

FOREST TREE NURSERIES

SUMMARY

The Branch of Nurseries is responsible for: all nursery and reforestation programs, including tree seed collection and purchase, seed extraction and storage, functional operation of the nurseries, seedling distribution, nursery research activities, survival records, obtaining and processing tree seedling orders, preparing budgets, and other fiscal procedures in obtaining payments for seedlings; also, coordination of the Commission's reforestation program with ASC, Soil Bank, and other agencies, including the Extension Service, Soil Conservation Districts, Vocational Agriculture, etc.; the above together with the future establishment, construction, development and operation of any new nurseries established in the state, and revision or development of additional new reforestation policies needed by the Commission.

Demand for seedlings remained at a high level, and even though a record number of seedlings was produced the Commission still could not satisfy all incoming orders. Interest in tree planting has stemmed not only as a result of the Conservation Reserve Program but also from scrub oak clearing in the sand hills section of the state, idle farm land due to industrial employment of landowners, higher timber returns, etc.

Since 1928, or some 32 years, a total of 932 million tree seedlings have been planted in South Carolina. Expansion of the



To date 932 million tree seedlings have been planted in South Carolina, putting approximately 1 million acres of idle land back into timber production.

reforestation program has been so fast that approximately 50% of these 932 million seedlings have been produced and distributed during the last three years. Of course, part of this impetus in tree planting can be attributed to the Soil Bank program; however, the demand for other than Soil Bank planting has tripled in the last four years.

As a conservative estimate, a return of \$5.00 per acre per year growth figure can be applied to the approximately 1,000,000 acres established to plantations. This means a cash return of \$5,000,000 per year to landowners that invested in tree planting and fire protection.

The forest survey report, which was made of South Carolina during 1958, indicates that we still have approximately 1,900,000 acres which need planting without any site preparation. In addition, there are approximately 3½ million acres which need planting, but first some site preparation will be necessary. Overall, therefore, our planting job is not near completion since there are a total of 5,400,000 acres which will have to be planted if they are to be productive. With the entire area planted, that needs to be planted, returns to the landowners of South Carolina would be well in excess of \$32 million per year.

Preliminary arrangements have been formulated in cooperation with Clemson College to conduct a nursery research program within the state. This will prove to be a very desirable program in that local problems can be investigated on a local level. Most of the research findings in the past have been in the adjacent states and, therefore, not always applicable to our state nurseries.

The Commission started taking applications for seedlings on March 1, 1959, and continued through July 31, 1959. By special agreement with the Budget and Control Board, payment for seedling applications which amounted to under 13,000 trees was accepted and deposited in the state General Fund even though two fiscal years were involved. In other words, the payment received prior to July 1, 1959, was held in a special account and then deposited in the state General Fund so that credit could accrue for the 1959-60 fiscal year. After July 31, 1959, all of the seedling orders which had been received were compiled and compared to the tree seedling inventory of the four nurseries, which indicated the type allocations that could be allowed to each seedling order. Basically, all of the orders for under 13,000 were filled as requested. Orders above 13,000 had to be reduced by



Seedlings, packed in bundles of 2,000 each, were sold at the nursery for \$3.00 per thousand or shipped to landowners at \$3.50 per thousand.

about 40 per cent above the basic 12,000. Excellent cooperation was obtained from the various agricultural agencies of the state in taking seedling orders and forwarding them to the Commission for further action. The cost of seedlings remained at \$3 per thousand, f.o.b. the nursery, or \$3.50 per thousand if the seedlings were sent to the landowner by express.

FOREST TREE NURSERIES ACTIVITIES

Distribution of Seedlings:

During this year, a grand total of 187,516,418 forest tree seedlings were distributed throughout the state. Of this total, 165,246,365 were produced in the four state nurseries plus seedlings custom grown for the state by TVA nurseries. The additional 22,270,053 were produced by either industry nurseries or brought into the state from outside sources.

Loblolly Pine	81,693,090
Slash Pine	82,127,300
Longleaf Pine	523,800
Arizona Cypress	109,475
Red Cedar	2,000
Shortleaf Pine	182,500
Yellow Poplar	124,000
White Pine	328,400
Bald Cypress	155,800
 Total	 165,246,365

In addition to the above seedlings produced and distributed by Commission nurseries, the following is a list of trees brought into the state or produced in the state by other nurseries.

West Virginia Pulp & Paper Co., Summerville	6,658,200
Brought into state by other industries	5,813,506
Brought into state by A.E.C.	9,798,347
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Total	22,270,053

Even with the tremendous increase in seedling production, the supply was still not sufficient to meet demand. In fact only about 70% of the over-all demand could be fulfilled. Likewise the number of tree seedling applications more than tripled from the average of 2,200 applications processed annually prior to 1957. Breakdown of the over-all demand for 240 million seedlings indicated that 130 million were ordered for the Conservation Reserve Program and 110 million were other than the Conservation Program.

The Conservation Reserve Program was started by the enactment of The Conservation Reserve Program Act by Congress in 1956. Following the legislation, the Commission of Forestry entered into the formal agreement with the U. S. Forest Service to establish nurseries and provide seedlings demanded for planting under Conservation Reserve. Through 1959-60, a total of 467,000 acres were placed in the Conservation Reserve throughout the state for tree planting. To meet this demand, approximately 467 million seedlings will be required. Through this year only 335 million seedlings were furnished the program and, therefore, necessitating a carry-over demand for 132 million seedlings.

With the investment that the Federal Government has in South Carolina nurseries, the Commission is committed to supply the program with 110 million seedlings annually until the needed trees are supplied. At the present it appears that the total number of seedlings needed will not be fully supplied until about 1962. This estimate is predicated on the assumption that the Soil Bank Conservation Reserve Program will not be extended beyond 1960, or that some new program will not be instigated.

Tables No. 10 and No. 11 in the Appendix are a record of seedlings distributed by counties and class of ownership. Table No. 12 is the total acreage planted by counties and acres in need of planting. The following table records the number of seedlings planted in South Carolina by years, including out-of-state seedlings.

Year	Total Distributed (State Nurseries)	Total Distributed (Inc. other sources)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255
1946-47	1,962,600	1,962,600
1947-48	11,356,990	11,356,990
1948-49	30,338,775	30,338,775
1949-50	29,501,955	29,501,955
1950-51	20,615,315	20,615,315
1951-52	16,619,000	16,619,000
1952-53	22,035,850	32,246,298
1953-54	36,210,100	42,852,314
1954-55	35,373,025	45,182,255
1955-56	34,413,550	42,931,755
1956-57	55,753,600	69,658,736
1957-58	60,846,200	93,369,084
1958-59	123,985,000	166,351,000
1959-60	147,146,365	187,516,418
Total	767,430,498	931,774,668

Forest Tree Seed Collection:

A very poor crop of cones on slash, loblolly and longleaf pine existed throughout the state during the year; therefore, collection was very limited. Experience has proven that during poor crop years, low quality and quantity seed are obtained. Also cost per pound of seed can be triple that of good seed years. Overall, the collection period extended from the last week of August until the last week of October during which period 2,546 bushels of pine cones and 11 bushels of yellow poplar were gathered. In obtaining tree seed throughout the state, the Commission of Forestry through its field offices locates private collectors in good seed producing areas to obtain the quotas which are set. Of the pine gathered, 1,809 bushels were slash pine and 737 bushels were longleaf pine.

This was the third year of operation of the new seed extractory which is located at the Tilghman Nursery. Excellent seed have been produced through this extractory with higher quantities and better quality seed being obtained per bushel of cones. Prior to the construction of the seed extractory, pine cones were processed in air curing sheds which were located at the old Sumter nursery. The average amount of seed obtained per bushel of cones in these air curing sheds amounted to approximately 0.6 pounds. In the new extractory, more than 1.0 pounds were obtained per bushel in both loblolly and slash pine. The average cost of the seed to the state since the operation of the above mentioned extractory has been \$1.60 versus \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Each year, usually during July, sample plots are taken in each county of the state from which a cone crop forecast report is compiled. The report this season indicated that the crop for 1960-61 would be only 45% as good as the 1959-60 crop and, therefore, is rated as "very poor". Conversely the 1958-59 crop was rated "very good" and, therefore, the reason for processing the 23,518 bushels of pine cones during a good seed year.

Seedling Survival Examinations:

When forest tree seedlings are outplanted one year by the landowners of the state, approximately 10% of the seedlings planted in each county are sampled to determine the over-all state survival rate. It is through these examinations that the Forestry Commission can ascertain in what direction more edu-

cation in tree planting should be directed in order to eliminate any plantation failures on the part of the landowners. As a matter of information, this past year the over-all state seedling survival rate is estimated 72% versus an over-all state average for several previous years of 55%. Part of this higher survival percentage can be attributed to the method employed presently in packaging and distributing seedlings from the state nurseries. The seedlings are packaged in such a manner that "heeling in" is not necessary nor desirable at the planting site. This procedure has not only been a saving to the landowner by eliminating the above rehandling of seedlings, but has also been an advantage to the seedlings themselves in that the plants were not disturbed through an additional handling.

Research:

Preliminary research studies have been effectively started in cooperation with Clemson College covering various problems concerning nurseries and the production of nursery stock. This cooperation has been badly needed over the past 28 years in that the only research previously being done was in adjoining states and the findings were not always pertinent to the nurseries within the state. Cooperative studies have begun on seedling bed densities, use of iron oxalate on both the nursery and outplanted seedlings, preliminary arrangements for annual soil testing through the facilities of Clemson College, etc. It is anticipated that after sufficient personnel are available to the research department at Clemson, that many of the other projects which should be investigated will be taken under advisement by the college.

Anticipated 1960-61 Seedling Production:

From preliminary inventories of all four nurseries, it is presently estimated that approximately 151 million seedlings will be available for distribution during the 1960-61 season. No additional seedlings will be available to the Commission from TVA nurseries as were previously custom grown for South Carolina from South Carolina seed sources. Species for distribution include loblolly, slash, longleaf, shortleaf and white pines, yellow poplar, and red cedar. It appears that even with this largest of all productions ever grown by South Carolina that the demand for seedlings will still not be met during next year's distribution.

NURSERIES

Horace L. Tilghman Forest Tree Nursery:

This was the thirteenth year of tree seedling production at the Tilghman Nursery since acquisition of the 104.5 acres of nursery land in 1946. Approximately 80 acres of the above total are available for seedling production with the remaining area being used for roads, buildings, supply storage, and seed extractory. The seed bed area allows for an annual production of 38-40 million trees on a 1-1 rotation. Production during the 1959-60 fiscal year amounted to a total of 39,052,550 seedlings. In addition, 9,938,550 seedlings were secured from Piedmont and Ridge Nurseries. Total distribution, therefore, amounted to a total of 48,991,050 seedlings.

The general soils type is predominately a red bay sand loam which was derived from unconsolidated sands and sandy clays of the coastal plains. Being a coarse sand, the soil is subject to heavy leaching when the soil organic matter is allowed to be depleted; therefore, it is imperative that the seedling crops be produced on a 1-1 rotation to allow for intensive soil building practices during alternate years.

Since the nursery was established, 409,655,485 seedlings have been produced and distributed. This represents an annual average of 31,511,960 seedlings. Of this production, 57.4% were slash pine, 40.4% loblolly pine, 1.6% longleaf pine and 0.6% miscellaneous species.

Considerable difficulty has been experienced with the outmoded irrigation system. Basically, it is an overhead system which was partially salvaged from CCC days. Delivery of water is not sufficient or well distributed. As a result, considerable damage was sustained to seedbeds during a severe windstorm. Sufficient water could not be delivered to wet down the straw mulch to prevent it from blowing from the beds and thereby damaging about 2 million trees. Also repair costs to the system annually have been excessive, and therefore warrant the installation of an up-to-date irrigation system.

Piedmont Forest Tree Nursery:

Land for development of the Piedmont Nursery was acquired in July, 1956, in the northwestern section of Pickens county. A total of 81.5 acres was purchased of which approximately 53



The lifting, culling, counting and bundling of seedlings is done almost entirely by local labor.

acres are available for tree seedling production. The remaining 28.5 acres constitute roads, stream, buildings and uncultivable land. The soil types range from sandy loam to loamy sand and are principally known as the Congaree and Wickham types as defined by the U. S. Soil Conservation Service.

During the past year a total of 25,490,156 seedlings were produced. In addition to these, 11,150,000 were received from TVA nurseries and distributed throughout the state. Since this is the third year of production, a grand total of 69,629,156 seedlings have been produced and distributed.

The soil types in the nursery are of higher quality than in any of the other nurseries, therefore it will be possible to plant part of the area on a 2-1 rotation without seriously depleting soil fertility. During the three years of operation considerable cost has been borne in weeding the nursery beds. As is true in all newly established nurseries, weeds are a great problem for several years. In fact, the costs can exceed \$400 per acre per season. This problem could be rectified by soil fumigation. Fumigation would destroy weed seed for at least a three-year period at a cost of about \$350 per acre.

Coastal Forest Tree Nursery:

In July, 1957, the state acquired, under a ten-year lease agreement, 100 acres of nursery land located approximately two miles north of St. George, South Carolina, along Highway 15. Of the 100 acres, approximately 73 acres are available for tree seedling production with the remaining acreage being used for buildings, roads and uncultivable land. Included in the lease agreement is a provision for a right-of-way to a water supply reservoir for irrigation purposes. The nursery improvements, equipment and construction were totally financed through the Soil Bank Conservation Reserve Program so that seedling production could be increased in South Carolina to more nearly meet the demand of the Conservation Reserve Program.

During the year, a total of 29,807,630 seedlings were produced. Since this was the second year of production, a grand total of 94,138,630 seedlings have been produced and distributed. Also, this year, 11,965,300 trees were received for distribution from Ridge nursery, 1,000 white pine from Piedmont nursery and 1,000,000 loblolly pine from TVA nurseries.

All of the soil is a Norfolk sandy loam medium phase which indicates that it will lend itself well to future seedling production and soil building practices. Having a sandy clay subsoil approximately 12 to 14 inches below the top soil allows for efficient fertilizer absorption together with limited irrigation. As soon as the organic content of the top soil is raised to a desirable level, parts of this nursery will lend themselves to 2-1 cropping. Over-all annual maintained production should average approximately 40 million trees even though the nursery was over-produced during this first year. It has been found through experience that in first year cropping most nurseries can be over-produced without serious depletion of the soils.

Since the area is adjacent to a savannah, which is densely populated with various species of oaks, it has been found that *Cronartium fusiforme* rust will be a serious threat to each crop and, therefore, will require special attention through applications of fungicide sprays during the active season of spores.

A major land leveling process was necessary on approximately 12.4 acres which required considerable dirt movement and a drainage system. With these additional 12.4 acres, however, the total plantable area was brought up to the above 73 acres which are available for seedling production.

Ridge Forest Tree Nursery:

During September, 1958, a fourth nursery site was acquired near Trenton, South Carolina, under a ten-year lease agreement



Ridge Nursery is one of four state forest tree nurseries producing seedlings to plant the 5.4 million acres in need of planting to trees.

which has a provision that the annual rental payments accrue to the final purchase price. Purchase can be effected during any period of the ten-year lease or immediately thereafter. Total area includes 110 acres of which 10 acres are used as a reservoir area. Of the remaining, approximately 75 acres are available for tree seedling production. The two parcels of land (100 acres and 10 acres) are separated by approximately a one-fourth mile right-of-way which is used for the water main from the reservoir to the nursery site proper. It was necessary to make this division in that water for the reservoir is supplied by a series of springs and contains approximately 67 acre feet of storage water.

The soil types include both the medium Norfolk fine sandy loam and the deep phase Norfolk fine sandy loam. The small portion that contains the deep phase Norfolk fine sandy loam will require intensive soil management for several years in order that the organic content may be built to a point where leaching is not a serious problem.

This being the first year of production, a total of 52,408,700 seedlings were grown and distributed. In addition, 76,000 slash pine, 19,500 Arizona Cypress and 11,000 white pine were received from the Piedmont nursery for distribution, 7,000,000 loblolly pine from TVA nurseries and 4,817,000 loblolly pine and 12,000 yellow poplar from the Tilghman nursery.

All permanent improvements and nursery layout have been completed during the 1959-60 fiscal year. All of these improvements, equipment, etc., were financed through the Conservation Reserve Program so that total allocations to the Program from state nurseries could be raised from the present 75 million seedlings to about 110 million seedlings.

RECOMMENDATIONS

1. There exists a great need for cone storage facilities at the seed extractory in that presently the Commission is taking advantage of good seed years. Since good seed years occur about every 3-4 years, it is necessary during collection years to obtain a 3-4 year supply of seed. The field collection period as noted under "Forest Tree Seed Collection" above is rather short and, therefore, an accumulation of large quantities of cones during a short period. At the time of construction of the seed extractory, it was not deemed advisable to overextend

the extractory facilities to an excessive extent so as to take care of the above mentioned influx of cones. The cones from the field offices are obtained over an eight-week period, whereas the extractory needs a sixteen-week period to process the cones and seed. With the above in mind, therefore, facilities for storing approximately 10,000 bushels of pine cones are badly needed.

2. A new irrigation system should be installed at the Tilghman Nursery so that more efficient irrigation can take place. The present overhead "skinner" system has been in use since CCC days and is not only obsolete and inefficient but also expensive in repairing each season. A new system designed permanently underground as is installed in the other three nurseries should be contemplated for more efficient nursery stock production. Basically, the lateral water supply lines are permanently placed underground with spaced risers occurring from these lateral lines connected to oscillating sprinkler heads. The presently installed water mains, pumping unit and water supply would not have to be altered to make the above requested conversion.
3. Since the Commission has been establishing new tree nurseries, the item of weeding has been an excessive cost in the annual operating budgets. In fact, in some instances, weeding costs have run in excess of \$400 per acre per year. It is recommended that next year all of the nursery beds which are used for the production of seedlings be fumigated with a soil sterilant known as methyl bromide. It is anticipated that the cost of fumigation will be approximately \$350 per acre; however, the fumigation will be effective against weed seeds for a minimum period of three years. Other advantages realized would be the control of nematodes and other destructive soil fungi.



The intentional burner continues to be a major problem in forest fire protection efforts in South Carolina. The Southern Cooperative Forest Fire Prevention Campaign materials draw attention to "Mr. Burnit" who is responsible for nearly 30 per cent of the illegal woods fire over the past five years. (See Information and Education section for details of the Southern program).

FOREST FIRE PROTECTION

INTRODUCTION

The forest fire control organization of the S. C. State Commission of Forestry is designed to render cooperative assistance to all individual timberland owners in the protection and control of wild fires on their timberlands. The state is divided into seven forest service districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district. These districts, with headquarters at Camden, Florence, Kingstree, Newberry, Orangeburg, Spartanburg, and Walterboro, are divided into county units, all of which have fire control organizations which work directly with private landowners in the prevention and control of fires on their timberlands. The cooperative assistance furnished each landowner is based on the theory that the landowner is primarily responsible for the prevention and control of fires on his property, and the Commission of Forestry cooperates with the individual in all fire protection desires and objectives. State and privately owned timberlands total some 11,175,000 acres. In addition, the U. S. Forest Service owns and is responsible for protecting 587,221 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres in the state.

County Units:

Fire protection work in each county unit is supervised by the unit ranger who is assisted by wardens, towermen, and tractor operators. During hazardous forest fire conditions, supplemental fire crews are employed to assist the regular unit organization. Much valuable assistance was rendered the regular unit forces during the fiscal year by some 9,058 individuals who volunteered their services in fire suppression work throughout the state. The total county unit personnel in South Carolina consists of 46 rangers, 134 wardens, 68 tractor operators, and 138 towermen.

County Forestry Boards:

In accordance with the State Forest Fire Protection Act, each county has a County Forestry Board consisting of five members who are appointed by the State Commission of Forestry upon the recommendation of the majority of the County Legislative Delegation. The members are appointed for a five-year term.

All of the members are residents of the county from which they are appointed and, accordingly, are familiar with local forest fire protection needs and objectives. During the years, individual board members have rendered invaluable assistance in the promotion of forest fire prevention and control work within their counties.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards is composed of one delegate from each county board elected by the membership of the board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities, including forest fire control, forest management, reforestation, and information and education. The Committee meets annually to discuss the proposed forestry program for the coming fiscal year and also considers the budget request which is submitted to the State Legislature. Individual committee members are responsible for familiarizing themselves with local forestry conditions and activities within their counties and making recommendations to the Commission of Forestry in an endeavor to further the over-all forestry program in South Carolina.

State Forests and Parks:

State-owned forests and parks in South Carolina comprise approximately 169,574 acres. The individual park superintendents and state forest directors are responsible for the protection of timberland areas within their boundaries on a cooperative basis with the Branch of Forest Fire Control.

Cooperative Agreements with U. S. Forest Service:

For a number of years the U. S. Forest Service and the Commission of Forestry have maintained a formal agreement to assist one another with the detection and suppression of fires which occur along the immediate vicinity of the national forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

Training is one of the most important phases of the fire control program. A continuous training program is carried on throughout the year. The majority of the training is conducted

on a local basis with emphasis being placed on training the individual for the job that he is responsible for carrying out. This training is normally given on the job by an employee's immediate supervisor.

In addition to individual training, periodic training sessions are held for specific groups of fire control personnel such as rangers within a district, towermen or weather station operators within the district. Also, during the year law enforcement training was given to all fire control personnel with the exception of towermen and tractor operators.

Inspection:

In an attempt to increase the efficiency of the fire control organization, complete unit inspections are made in each county every two years. These inspections go into considerable detail and cover all phases of fire control activities within a county unit.

Mechanized equipment inspections are a standard part of the inspection program and are conducted in an endeavor to minimize equipment breakdowns, reduce maintenance costs, and keep equipment operating costs down. These inspections are conducted by the traveling mechanics and the district heavy suppression unit operator-mechanics.

Fire Control Progress Checks:

A fire control progress check was conducted in the Orangeburg District during the year. The progress check is conducted by the Columbia fire control staff and is designed to check the fire control status and progress of all phases of the fire control program within a given district. These progress checks are made periodically in each district and contribute materially to the efficiency of the fire control program.

Law Enforcement:

Special emphasis was placed on the law enforcement program during the year in an endeavor to continue to intensify the law enforcement program.

The State Law Enforcement Division and also local law enforcement agencies were of invaluable assistance to the Fire Control Branch in carrying out its law enforcement program.



The State Law Enforcement Division, local law enforcement agencies help train Forest Fire Control personnel in the techniques of investigation of fire causes.

There were a total of 242 prosecutions and 230 convictions obtained for violators of the various forest fire laws for the fiscal year. Of this number, 30 of the prosecutions and 27 of the convictions were for the violation of the burning permit and/or notification laws; 206 prosecutions and 196 convictions were for violations of the careless and negligent law; and 9 of the prosecutions and 9 convictions were for the violation of the wilfull and malicious law. Three of the above prosecutions and two convictions involve the same individual who was indicted under two separate state fire laws. Out of the 230 convictions, 92 received total suspended sentences.

Of the 2,958 fires that occurred, 587 were classified as incendiary fires with 169 of these being classified as wilfull and malicious fires. The other 418 incendiary fires were classified as fires without malicious intent.

A burning notification law was enacted in Beaufort County during the year bringing the total to 13 counties now having either a burning notification or permit law. Counties with the permit law statutes are Aiken, Orangeburg, Georgetown, Charles-

ton, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Counties with notification law statutes are Beaufort, Colleton, Hampton, and Jasper.

Fire Plans:

The daily activities of all county unit personnel are governed primarily by a county unit fire plan which has been prepared and is used as a guide by the unit ranger in carrying out forest fire protection and control work within his county. These fire plans contain specific information regarding fire protection activities and the movement of personnel in carrying out their various responsibilities in accordance with fire weather conditions which exist from day to day.

In addition to the unit fire plans prepared for the county organizations, a number of similar plans have been prepared for private landowners throughout the state to use in an endeavor to maintain adequate fire protection on their private holdings.

Forestry Legislation:

During the 1960 session of the General Assembly, the Beaufort County Delegation introduced and were successful in enacting a burning notification law for Beaufort County which is quoted below. This Beaufort County law is typical of notification laws already in effect in three other counties of the state. Nine other counties have burning permit laws which are similar to the following but differ in that they require an actual permit rather than notification by telephone or other means.

ACT NO. 790

“An Act making it unlawful to start any fire on any woodlands, brushlands or grasslands in Beaufort County between October fifteenth and July first, without first giving notice to the State Forester or his representative, to provide for the enforcement thereof and to provide penalties for violations.

Be it enacted by the General Assembly of the State of South Carolina:

SECTION 1. It shall be unlawful for any landowner, lessee, or any employees of such owners or lessees to start, or cause to be started, any fire in any woodlands, brushlands, grasslands, ditch-

NOTIFICATION

MUST BE GIVEN TO A REPRESENTATIVE OF THE S. C. STATE COMMISSION OF FORESTRY BEFORE BURNING WOODLANDS, BRUSHLANDS, GRASSLANDS, DITCHBANKS, HEDGEROWS, OR MATERIALS ADJACENT TO WOODLANDS IN THIS COUNTY DURING THE WORST FOREST FIRE SEASON MONTHS, OCTOBER 15 TO MAY 15.

1. Any person wishing to burn their woodlands, grasslands, brushlands, ditchbanks, hedgerows or materials adjacent to woodlands between October 15 and May 15 must notify the County Ranger or his representative.
2. Any person not owning the land must have the authorization of the landowner before giving notice of intent to burn.
3. Even though you do give notice of intent to burn, it is unlawful to conduct such burning unless the area or material to be burned has been cleared around and all reasonable precautions taken to prevent the uncontrolled spread of your fire.
4. Any person violating this act shall be guilty of a misdemeanor and upon conviction shall be fined not more than twenty-five (\$25.00) dollars or imprisoned for not more than ten (10) days.
5. For a second offense, the punishment shall be a fine of not less than twenty-five (\$25.00) dollars nor more than one hundred (\$100.00) dollars or imprisonment for not more than thirty (30) days.
6. Burning Notification Stations have been established throughout the County in order to make it easy for Citizens of the County to make notification. No charges shall be made for receiving notification.
7. This law does not relieve you from complying with all other State and Federal Fire Laws.

**THIS LAW IS TO PROTECT YOU AND YOUR
NEIGHBORS FROM CARELESS BURNING**

**HELP KEEP CLARENDON COUNTY
GREEN — STOP WOODS FIRES**

S. C. STATE COMMISSION OF FORESTRY

Approval of a notification law in Beaufort County in May 1960 brings to thirteen the number of counties in South Carolina that have either a burning permit or notification law.

banks, hedgerows, or in any debris, leaves or other inflammable material adjacent thereto, in Beaufort County, between the fifteenth day of October and the first day of July, inclusive, without giving notice at least one hour prior to the time of starting such fire, to the State Forester, or his duly authorized representatives, or other person designated as such representative by the State Forester. Such notice shall contain all information required by the State Forester or his representative. No charges shall be made for receiving such notice. Any employee of a landowner, or lessee of any land, or an employee of any lessee of land, prior to giving such notice of starting fire in such above mentioned areas or inflammable material, must have the authorization from the owner to conduct such burning. It shall be unlawful for any person to conduct such burning unless he previously shall have carefully cleared around the area or material to be burned and shall have taken all reasonable care and precaution to prevent the spread of such fire to areas or materials other than that of which notice has been given. The provisions of this act shall not apply to fires which may be started within the corporate limits of any town or city in the State, nor to fires started on rights of way of railroads by their duly authorized employees to remove fire hazards, unless the State Forester, or his representative, after investigation shall notify such railroad or State and county road officials that their practices are disapproved on account of failure to exercise proper safeguards against the spread of fire. The State Forester, or his authorized representative, may, at any time when deemed necessary in the interest of public safety, direct that such fires along railroad rights of way be not started.

SECTION 2. Any person violating any provisions of this act shall be guilty of a misdemeanor and, upon conviction, shall be fined not more than twenty-five dollars, or imprisoned for not more than ten days. For a second offense, the punishment shall be a fine of not less than twenty-five dollars nor more than one hundred dollars or imprisonment for not more than thirty days.

SECTION 3. All acts or parts of acts inconsistent herewith are repealed.

SECTION 4. This act shall take effect upon approval by the Governor.

Approved the 16th day of May, 1960."

Legislative Forestry Study Committee—Forest Fire Control:

During the 1955 session of the General Assembly, a legislative committee was appointed to study the forestry program in South Carolina and make recommendations to the General Assembly each year. This Committee, which originally was set up to study forest fire conditions in the state, was, in later years, broadened to cover the entire scope of forestry. Many accomplishments during recent years have been directly credited to the efforts and recommendations of this Committee.

Southern States Fire Control Conference:

The twenty-first Southern States Forest Fire Control Conference was held in Mobile, Alabama, in May of 1960. These annual meetings are designed to promote the efficiency of forest fire control efforts in fire protection work.

Southeastern States Forest Fire Compact Commission:

The Southeastern States Forest Fire Compact Commission includes the participation of the ten Southeastern States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

The membership of this Commission from each state is comprised of a Compact Administrator (the State Forester) and a four-member advisory committee. The South Carolina membership includes Senator L. Marion Gressette of Calhoun County, Representative Charles G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County and Richard Coker of Darlington County.

The governing body of the Compact Commission is a five-man executive committee headed by a chairman. State Forester Chas. H. Flory was elected to this position and served for two years during the organization and setting up of the Compact. The present Compact Chairman is State Forester J. M. Stauffer of Alabama.

The Compact States held a field exercise on fire organization at Eatonton, Georgia, during the month of August. All of the states participated with several of the states providing fire suppression equipment, including South Carolina who sent three pieces of mechanized equipment. The purpose of the exercise was to give supervisory personnel from each state some training in large fire organization.

South Carolina now has complete facilities for setting up a fire headquarters unit for large fire operations which was built mostly from excess property. This equipment is also available for loan to any of the Compact States according to the agreements in the Compact Act.

Civil Defense:

The Commission of Forestry cooperates with State Civil Defense in relaying messages to and from State Civil Defense Headquarters and local civil defense chairmen. This cooperative assistance is rendered during any emergency or disaster which may hit the state, as well as participating in civil defense alerts which may be scheduled from time to time. All messages are relayed over the Commission's two-way radio network by members of the Central Fire Control Office, district offices, and county radio facilities.

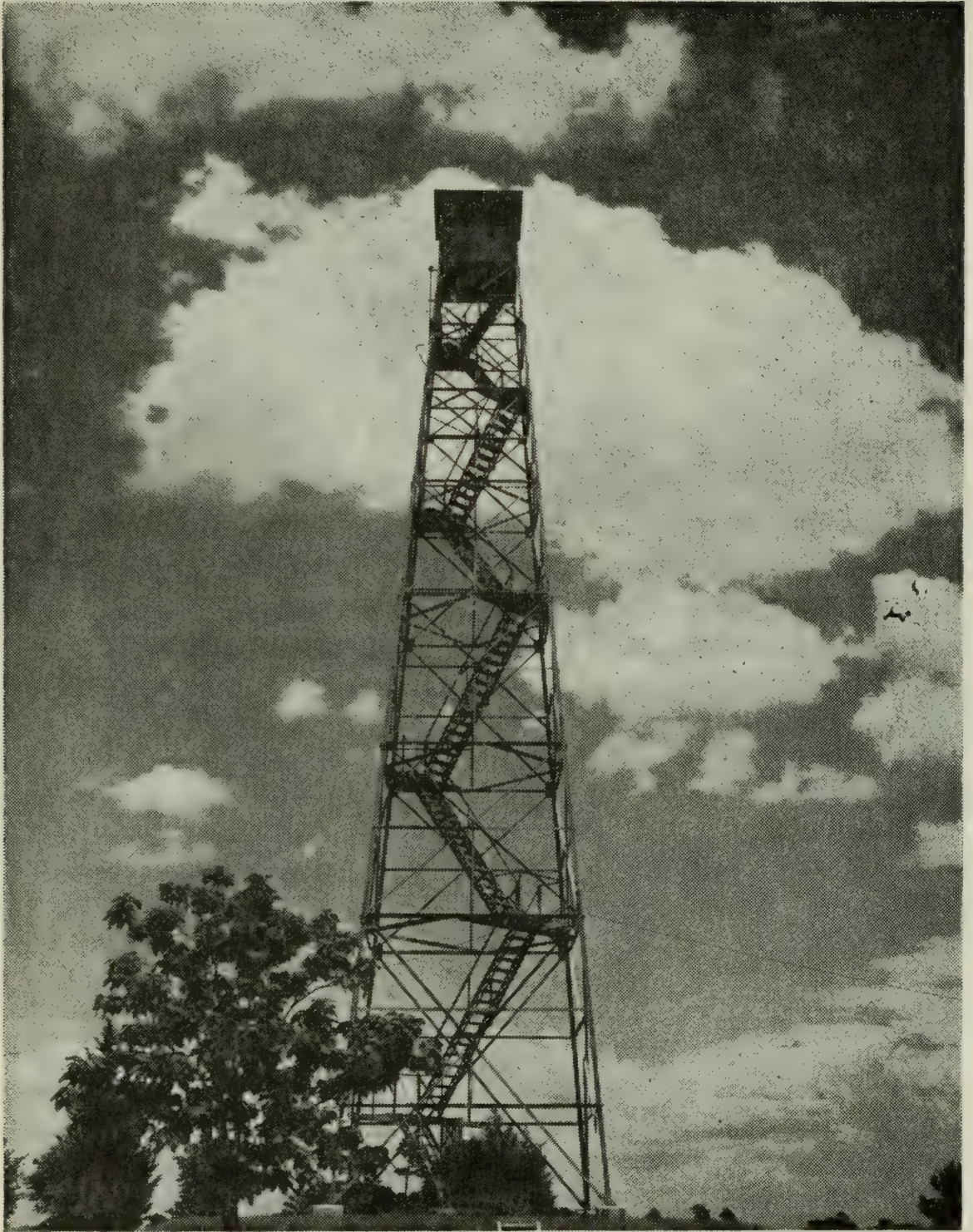
IMPROVEMENTS, TOOLS AND EQUIPMENT

Lookout Towers:

The Commission of Forestry operates 138 forest fire lookout towers in the state. In addition to the state-operated towers, the U. S. Forest Service owns and operates a number of lookout units on the Sumter and Francis Marion National Forests. All tower-men, both state and federal, cooperate in spotting and locating fires which occur within their visual range.

Tower Unit Buildings:

Only limited progress was made during the year with the maintenance of tower unit dwellings and outbuildings owned by the Commission. Forestry personnel are capable and available to carry out all of the maintenance work; however, the program is hampered considerably due to lack of sufficient funds. The living quarters of these tower units are not equipped with sanitary facilities; however, funds were made available to put sanitary facilities in during fiscal year 1960-61, and this program is underway.



Towermen, many of whom are women, maintain watch over 12,000,000 acres of forest land from 138 lookout towers scattered over South Carolina. Promptness in detection, reporting and dispatching is a must in an effective fire suppression program.

ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

135 Lookout Tower Units	\$ 2,947,503
46 Fire Danger Measurement Stations	3,450
250 Miles Telephone Line	75,000
Central Repair Shop and Warehouse System	286,480
Central Radio Shop and Map Laboratory	25,000
6 District Repair Shops	30,000

Radio:

7 Remote Control Base Stations, 60 watt	@	\$1,200	\$	8,400
2 Remote Control Base Stations, 60 watt	@	1,800		3,600
1 Remote Control Base Station, 250 watt	@	3,600		3,600
1 Remote Control Base Station, 100 watt	@	2,000		2,000
26 Base Station Units, 50 watt	@	900		23,400
155 Base Station Units, 10, 25, and 30 watt	@	535		82,925
250 Mobile Units (Single Channel) in Trucks and Cars	@	550		137,500
46 Mobile Units on Tractors	@	650		29,900
6 Mobile Units (Dual Channel)	@	625		3,750
5 Portable Units	@	400		2,000
35 Special Radio Control Units for Wardens	@	135		4,725
90 Auxiliary Receivers (in Wardens' Homes)	@	250		22,500
				<hr/>
				324,300
				<hr/>
TOTAL			\$	3,691,733

Equipment:

During the fiscal year, no additional fire suppression units were purchased. One additional heavy unit was made up from existing and surplus equipment and assigned as an extra unit stationed at the Central Repair Shop in Sumter. Ten new ranger pickup trucks were purchased as replacements for old worn-out units. Five old light tractor suppression units were replaced with new crawler-type tractors during the year. One new station wagon was purchased for a replacement of a vehicle operated by a radio technician. One pickup was purchased as a replacement for the Supervising Mechanic located at the Central Repair Shop in Sumter.

**INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT
AND ESTIMATED REPLACEMENT VALUE**

June 30, 1960

2,044	Back Pack Pumps	\$ 32,620
5,014	Fire Rakes	17,220
2,669	Fire Swatters	10,656
323	Backfire Torches	6,600
10	Heavy Suppression Tractor-Plow Units w/Transports	228,000
3	Heavy Dozers	80,000
1	Medium Suppression Tractor-Plow Unit w/Transport	20,800
69	Light Tractor-Plow Units w/Transports.....	520,950
1	Heavy Lowboy Truck-Transport	10,000
45	Ranger Pickup Trucks	78,750
1	1/4-Ton Jeep	2,250
7	Sedan Delivery Trucks	14,000
3	2-Ton Stake Body Trucks	7,650
16	1/2-Ton Pickup Trucks	28,000
1	Mobile Field Headquarters Unit	3,200
1	Field Kitchen w/Power Supply Trailer & Water Truck	14,000
1	Supply Van	2,500
TOTAL		\$ 1,077,196

Equipment Maintenance Shop:

The Fire Control Branch operates a Central Repair Shop at Sumter where heavy and specialized repairs are made to all fire control equipment. Three traveling mechanics, headquartering at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator and the district mechanic, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 904 complete field inspections of equipment and conducted 979 field repair jobs.

The Central Shop personnel at Sumter made many repairs to automotive equipment owned by the Commission and manufactured many items necessary for field use. Some of the work handled by the mechanical force is listed below.

Major repairs were made to 60 light tractors, 3 heavy tractors, 76 light trucks, 54 heavy trucks, 1 light plow, 1 light trailer, and 6 heavy trailers. Minor repairs were made to 7 light tractors, 18 light trucks, and 4 heavy trucks.

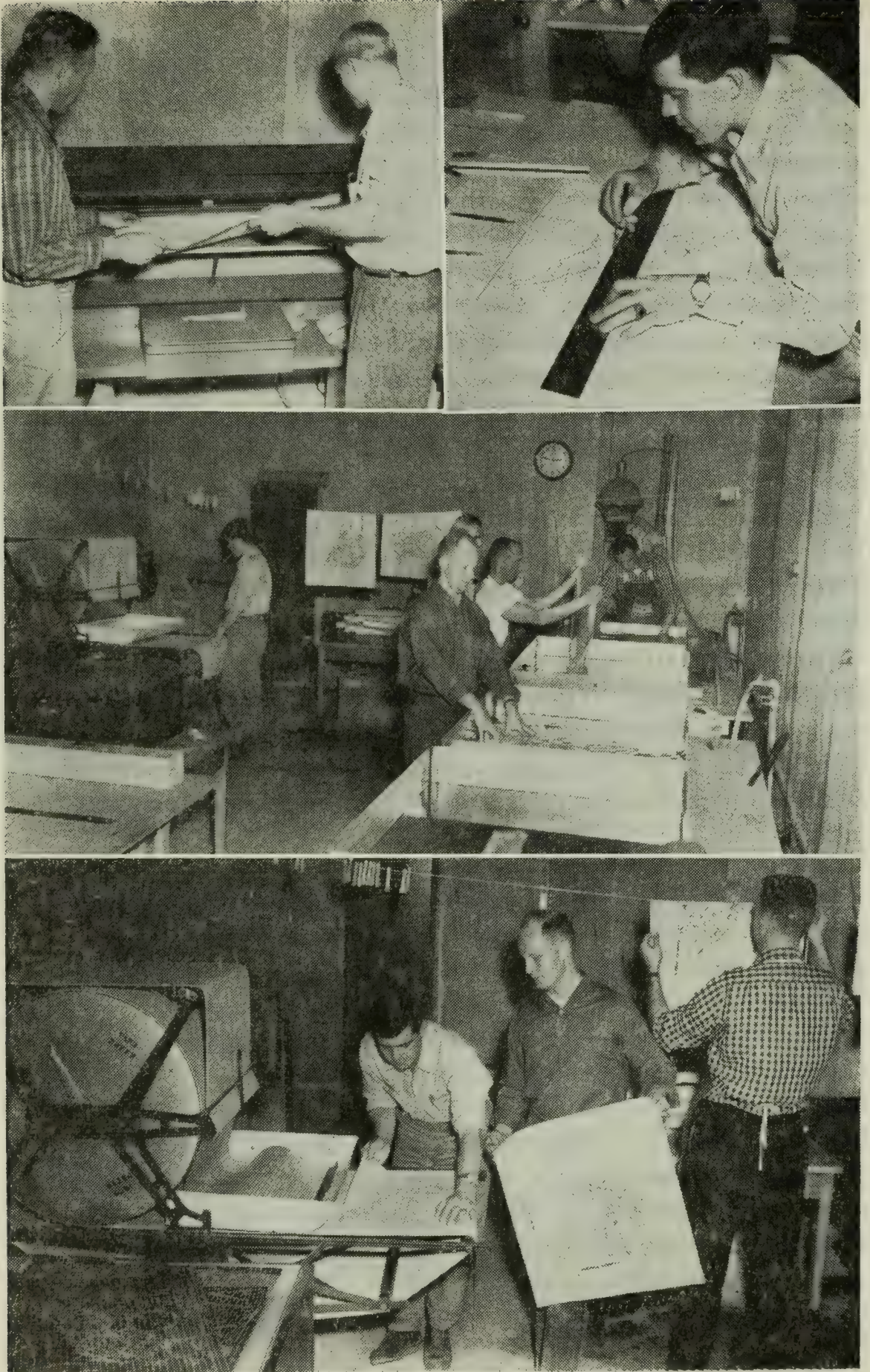
In addition to repair work, many items were manufactured at the Central Shop. Work done includes modifying or building equipment bodies, making booster tanks, radio boxes, and equipment racks. Repairing and putting into service surplus equipment is also done at the Central Repair Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. These facilities are used for warehousing certain materials and supplies necessary for the efficient operation of each of the Forestry districts and by the tractor operator-mechanics who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district. The traveling mechanics who operate from the Central Repair Shop at Sumter will also use the shops in assisting the local mechanics to more effectively keep all motorized equipment in good operating condition at all times and to make any necessary repairs which may be needed locally.

Columbia Radio Repair Shop:

During the summer and fall of 1958, a new central radio communications maintenance and repair shop was erected at 241



Foresters use their drafting skills to provide state and county forest fire fighters and lookout towers with accurate and up to date maps.

Catawba Avenue in Columbia. This building is being used as a central headquarters for all radio communications installations, maintenance, and repairs for the entire state. This central radio shop coordinates the activities of all district radio technicians who are assigned to district repair shops in the various forest service districts.

Fire Control Maps:

A new map laboratory was installed in one section of the central radio repair shop during fiscal year 1958-59. This laboratory, complete with drafting room and map making equipment and facilities, is being used to manufacture all forest fire control maps which are needed by district and county unit personnel in carrying out fire protection activities within the state.

Telephone Lines:

The telephone system of the Commission of Forestry has been considerably reduced in mileage over the past several years by replacement with two-way radio. However, at the end of the fiscal year, the Commission continued to maintain in operation 250 miles of line along with associated instruments, etc., for providing services essential to the Commission's activities and for which radio is not suited.

There were no major changes made to the system during the year except for the dismantling of approximately 82 miles of old lines which had been replaced by radio. The usual routine maintenance program was carried on during the year by personnel of the Commission in such manner that service was satisfactory on the lines throughout the year.

Radio:

An intensive preventive maintenance program was continued from last year, and a modification of all transmitters was begun in order to comply with a Federal Communications Commission ruling requiring that modulation be reduced to narrow band specifications.

Frequency, power and modulation measurements were maintained as required by the FCC.

Use of Aircraft in Fire Control:

Radio-equipped planes are used on a contract basis when necessary to supplement the lookout towers. During periods of low

visibility towers cannot adequately cover their area of responsibility and, without the use of airplanes, many fires would occur and burn for a long period of time undetected before they are accidentally discovered and reported to the fire control organization. Whenever large fires occur, planes are also used to direct the actions of the ground suppression forces. During periods of high fire occurrence, air observers direct fire suppression personnel to those fires which need greatest attention and assist them in organizing their plans of attack.

Fire Danger Measurement:

Fire danger measurement stations are located in each county of the state. Readings are taken at these stations twice daily and the information disseminated to all fire control personnel to keep them informed of current degrees of fire danger. Fire control personnel use this information to determine the probability of fire occurrence and also the expected rate of spread in the event fires occur. Accordingly, personnel are better able to plan their daily work activities and when necessary, make themselves available for immediate fire call. Class fire days are rated from 1 to 5, with 1 the lowest and 5 representing the highest degree of fire danger. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the 5 major ratings: 206 Class No. 1 days; 104 Class No. 2 days; 41 Class No. 3 days; 14 Class No. 4 days; and 1 Class No. 5 day.

Legal Fires:

Each year a number of landowners in South Carolina elect to prescribe burn their timberlands for some specific purpose. All fires without regard to reason for burning conducted by the landowner or his authorized agent and confined to the boundaries of his property are called legal fires and are not included in the illegal fire statistics published by the Commission of Forestry. During the fiscal year 1959-60, a total of 1,640 fires burning 134,493 acres were handled by landowners or their agents in South Carolina. Three hundred sixty-two fires which burned 55,651 acres were conducted for forest fire hazard reduction. Burnings on hunting preserves accounted for 255 fires and 61,629 acres burned. Some 636 fires which burned 4,098 acres were handled to rid areas of debris and trash. Burning of tim-

berland areas for grazing purposes accounted for 285 fires burning 8,291 acres. One hundred two fires which burned 4,824 acres were conducted for miscellaneous purposes such as destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

South Carolina's forest fire record for the fiscal year 1959-60 was the second best in the history of the Commission's intensive forest fire protection program. A total of 2,958 fires burned 29,785.8 acres or 0.27 per cent of the total forest land in South Carolina. The average area burned per fire was 10.1 acres. These statistics may be compared with the past five-year average of 3,709 fires and 42,634.5 acres burned annually. The five-year figures indicate that the average per cent area burned is 0.38 and the average area burned per fire is 11.5 acres. Moderate fire occurrence and acreage burned was experienced generally throughout the state during the entire year. Rather high fire occurrence and acreage burned was experienced during three weekly periods in the spring of 1960. Four hundred ninety-five fires burned 5,846 acres during the week ending March 26. One hundred eighty-three fires which burned 5,621 acres were experienced during the week ending April 9. Three hundred eleven fires burning 3,532 acres occurred during the week ending April 16. A total of 989 fires burning 14,999 acres were handled by Commission of Forestry personnel during this three-week period.

During fiscal year 1959-60 counties which experienced a high rate of fire occurrence and acreage burned were: Berkeley with 213 fires burning 2,658 acres; Charleston, 157 fires burning 779.2 acres; Florence, 153 fires burning 1,583.8 acres; Horry, 150 fires burning 1,647.3 acres; Williamsburg, 168 fires burning 3,348.4 acres. Chesterfield County experienced only 68 fires during the fiscal year; however, some 4,227.7 acres were burned. Only four counties of the state experienced acreage burns which exceeded one-half of one per cent of the total forest area in the county. These are: Berkeley, 0.67%; Chesterfield, 1.36%; Florence, 0.54%; Williamsburg, 0.78%.

Counties which experienced relatively low fire occurrence and acreage burned were: Allendale, 16 fires burning 164.7 acres; Bamberg, 18 fires burning 125 acres; Calhoun, 6 fires burning 23.5 acres; Cherokee, 14 fires burning 69.4 acres; McCormick,

13 fires burning 21.7 acres; Newberry, 13 fires burning 94.4 acres; and Saluda, 18 fires burning 41.9 acres. Those counties that experienced acreage burn figures less than 0.05 or less of one per cent of the total forest area in the county were: Calhoun, 0.02% ; Cherokee, 0.05% ; Fairfield, 0.03% ; Lancaster, 0.05% ; McCormick, 0.01% ; Newberry, 0.05% ; Oconee, 0.05% ; Pickens, 0.04% ; Saluda, 0.03% ; and Union, 0.05% .

Smokers caused 32.2 per cent of all the illegal forest fires in South Carolina during the fiscal year. This cause was closely followed by debris burning which accounted for 30.8 per cent of the fires which were recorded. Incendiarism accounted for 19.8 per cent.

The fiscal year 1959-60 was the wettest year ever recorded in South Carolina. The 64.29 inches of precipitation which was recorded at the 46 fire danger measurement stations in the state represent a departure from normal of 15.46 inches of rainfall over and above the state average. The average amount of rainfall experienced over the state and the departure from normal by months is shown below :

Month	Amount Rainfall (Inches)	Departure from Normal (Inches)
July -----	9.11	+ 3.34
August -----	4.85	— 0.81
September -----	9.49	+ 5.46
October -----	8.63	+ 5.82
November -----	1.48	— 1.43
December -----	3.27	— 0.90
January -----	6.29	+ 2.52
February -----	6.66	+ 2.85
March -----	5.22	+ 0.68
April -----	3.12	— 0.65
May -----	2.42	— 1.06
June -----	3.75	— 0.36
TOTAL -----	64.29	+15.46

A five-year summary of precipitation by fiscal years is shown below:

Year	Amount Rainfall (Inches)	Departure from Normal (Inches)
1955-56 -----	43.16	— 4.01
1956-57 -----	43.15	— 4.02
1957-58 -----	55.18	+ 7.93
1958-59 -----	47.03	— 1.80
1959-60 -----	64.29	+15.46
Average -----	50.56	

INFORMATION AND EDUCATION

INTRODUCTION

With every passing year the 12 million acres of forest land in South Carolina are becoming more important to the progress of the economy and the well-being of the people of our state. With this ever-increasing importance there is growing need for stepped-up activities in forest conservation and development to make each acre of forest land produce the maximum amount of wood fiber, as well as provide the necessary recreation facilities to our ever-increasing population. The part that our woodlands play in the supply of good and plentiful water for both home and industrial use is also becoming increasingly important.

A good, sound forest conservation program involves not only trees but people as well. The success of the Commission's forest conservation activities depends upon an adequately informed public, and involves many people and many different activities.

The Commission functions on the premise that every member of its organization has a part in the educational program. Personnel of the Commission reach out in the educational program through press releases, photographs, pamphlets, talks, field demonstrations, films, radio and television programs. Through these media South Carolinians are made aware of the seriousness of the problems that face our state in the maintenance of our state parks that serve as playgrounds for millions every year, and the conservation of our natural resources that make possible a livelihood for many and comforts and necessities for all.

The Commission's educational program is geared to point out to every South Carolinian that he has a stake and a responsibility not only in the present but also in the future of the state parks and forests of South Carolina. It is a fact that the forests of South Carolina support the state's second largest industry, second only to textiles. It is also a fact, though, that the state's woodlands are producing at less than half of their potential capacity. When the landowners and people of our state realize the potential value of woodland production and apply practical methods of conservation and wise use, the amount of timber available for commercial use can be more than doubled.

The problems of forest conservation and stepped-up production of forest products can be solved through a three-fold pro-

gram. The first step is the prevention of wild woods fires. The second is an improvement of forest cutting and management practices. And the third is restocking idle agricultural land as well as understocked and idle woodland.

The aim of the Commission's information and education program is to get forestry and state park information to the people of South Carolina so that the problems confronting us may be solved. Information and education efforts are keyed to the following points:

1. Forest Fire Protection

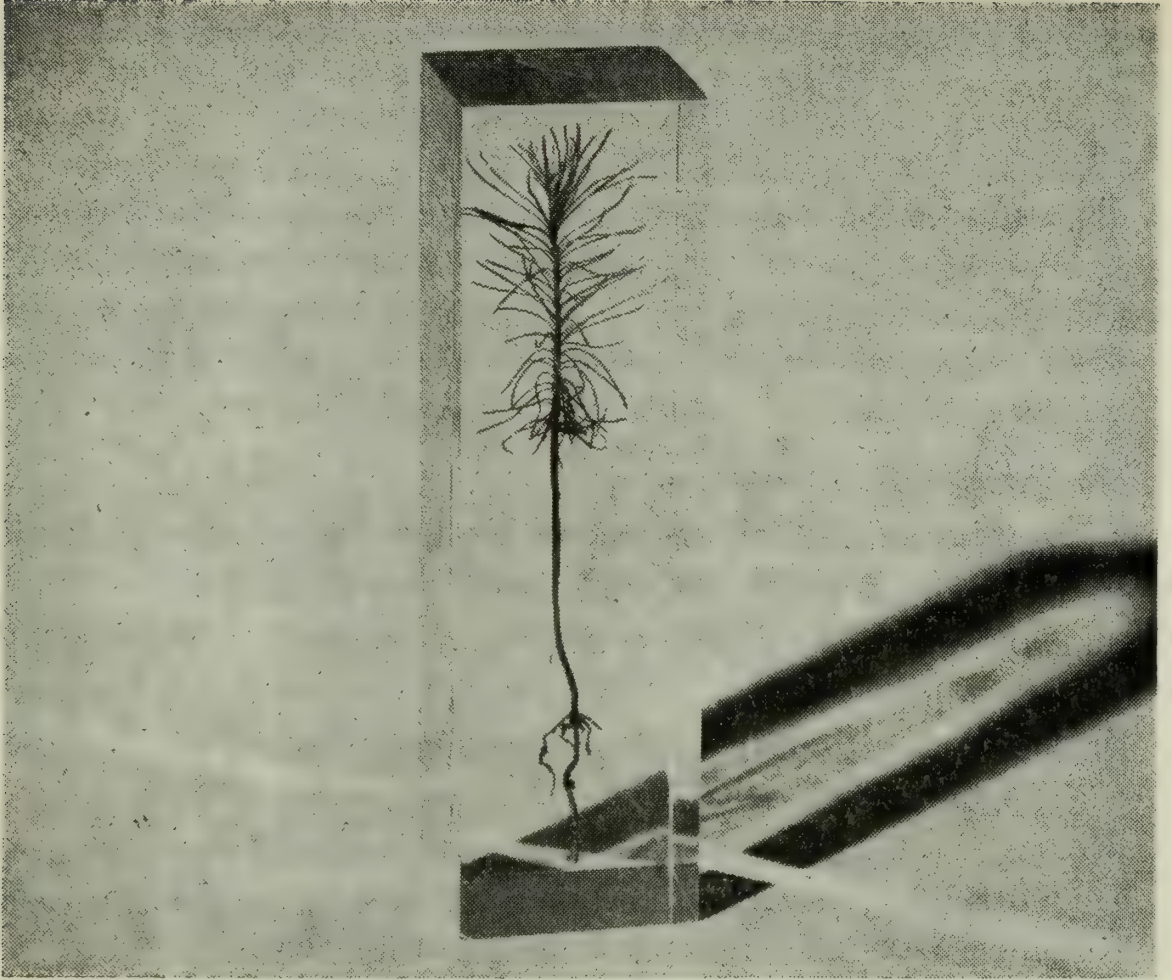
More than 3,700 illegal woods fires occur annually in South Carolina, with 99 per cent being caused by people.

2. Unwise cutting practices mean low production and inferior forest products.
3. Trees should be planted on more than five million acres of idle or unproductive land.
4. Improvement of the quality of many existing stands of timber throughout the state by the removal of inferior species as well as low grade and poor-quality trees.
5. Full appreciation should be developed in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of South Carolina.

FOREST FIRE PREVENTION

A realistic localized approach to teaching forest fire prevention is used by all personnel of the State Commission of Forestry. Particular emphasis is given the damage caused by the average slow-burning quiet fire that so many South Carolinians are accustomed to seeing, with the spotlight on the loss of little trees as these fires sweep through our woodlands. Attention is drawn to the protection of little trees as the key to adequate stocking of our woodlands in the future.

Emphasis by the Commission of Forestry on the little tree as basic to an understanding of what is lost in a forest fire, began in 1950. A number of posters, pictures and other items highlighting the little tree have been developed and used. One of the most eye-catching is a pine seedling embedded in clear plastic. After considerable experimentation by the Commission the job of pro-



Embedded in clear plastic, this little pine seedling is used by Commission personnel to gain the interest of people in helping prevent woods fires.

ducing little trees in plastic was turned over to Carolina Biological Supply Company, Elon College, N. C. The following article appeared in a recent publication of this company, "Carolina Tips": "In the summer of 1953, the S. C. State Commission of Forestry came to us for aid in a project they were developing. Their idea was to embed pine seedlings in clear plastic blocks to serve as visual aids which fire wardens and conservationists could take into the field for use in on-the-spot education. Together we were able to work out details and furnish the Commission a total of four hundred plastic mounts of pine seedlings.

"It had been the long-standing practice of farmers to burn over their timber stands annually to rid them of unwanted undergrowth. The practice accomplished this purpose, but the farmers were unwittingly destroying future timber by killing the pine seedlings which normally reseed the stand.

"When pine seeds are shed from the cones they fall to the ground. Many find a suitable environment for germination in

the covering of needles and woods mould on the forest floor. Annual burning of the woods not only destroys the seedlings but prevents the accumulation of decaying humus which is necessary for germination of the seeds.

"The emphasis on forest conservation had previously centered around the preservation and conservation of standing timber. Now the South Carolina Commission of Forestry envisioned a new approach to the problem—protection of the 'little tree.' This emphasis would be a two-edged attack because protection of the seedling would accomplish protection of the standing timber simultaneously.

"Since a pine seedling is so insignificant in size compared to other growth in the forest, not many people had ever noticed them or thought much about their existence. The first step in the education of the public was to point out the 'little tree' and to establish its value.

"Since 1953, the mount of the pine seedling has been an educational tool in the State of South Carolina. A couple of years ago our company president, driving through the state on his way south, spotted a Forest Service truck parked by the road. He stopped and asked the warden if he might see his plastic mount of the 'little tree.' Sure enough, the warden reached into his glove compartment and brought one out.

"Emphasis on protection of the seedling is a concern of industrial users of wood products. Many lumber concerns, pulp and paper companies, and container manufacturers have reforestation programs in full swing to insure a continuing supply of trees.

"Since 1953 we have furnished more than 1600 plastic mounts of the pine seedling to the nation's leading users of forest products. Each mount focuses attention upon the origin of the timber stand—the seemingly insignificant seedling—and its need of protection. . . .

"This project was valuable for two reasons. On the one hand, it stressed the importance of informed personnel. On the other, it graphically presented the fact that it is the seedling which points the way to conservation of one of our most valuable natural resources."

A serious effort is made to reach every man, woman, and child possible within the state of South Carolina through personal contacts; posters and publications available through the

national Cooperative Forest Fire Prevention Campaign; and illustrated talks and motion picture showings in community meetings, in private homes, civic club meetings, and school rooms. Wall and pocket calendars, roadside signs and exhibits, and other materials produced by the Commission, broaden the means of bringing the conservation message to each and every citizen in the state. Considerable credit is due also to other interested agencies, both private and governmental, for their cooperation in assisting the program of education of the Commission of Forestry.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The message of the Cooperative Forest Fire Prevention Campaign, with the support of the Commission of Forestry and media of public information reaches in one way or another nearly every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, bookmarks, newspaper ads, radio platters, TV spots, films, and other materials to bring forest fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flashlights, wallets and moccasins, T-shirts, scarfs, fishing tackle and archery sets, cigarette snuffers and ashtrays, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, banks, coloring books, comic books, story books, bubble bath, buttons, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls, and other items.

A MATCH CAN BE A DEADLY MISSILE



Remember:

ONLY YOU CAN PREVENT WOODS FIRES!

The potential danger in the little fire of a single match is illustrated vividly in the basic poster of the 1959 CFFP program.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Feeling the need for a more local slant than some of the published materials in the national campaign can provide, the states and the U. S. Forest Service in the Southern region have continued to cooperate in the production of forest fire prevention materials with a Southern flavor. State Forester Flory is a member of the committee guiding the development of this program. The second year's operation of the Southern program saw continued production of recorded radio spots, a series of TV spots, films, news ads, and a poster, all of which are currently being distributed. The Southern materials will not replace, but will supplement the national materials and should help intensify and strengthen forest fire prevention efforts in South Carolina.

The Southern CFFP program is not a cure-all for the forest fire problem in the South. However, it can be mighty potent and effective medicine, particularly as it is coordinated and supported by the national Smokey Bear program, and the special fire prevention programs at the state, county, and local levels.

FOREST FIRE RECORD

The branch of Information and Education continued to keep the press and public informed accurately as to the forest fire situation throughout the state, stressing the need for particular care during the critical dry and windy months of January, February, March, and April. This information is made available by articles and photographs for newspapers, and motion picture footage for television use, for example.

The continuing occurrence of intentionally set fires during the year pointed up the urgent need for an intensified program of child and adult education as well as the need for a strengthened law enforcement program.

SCHOOL PROGRAMS

School children throughout the state receive a major share of the time and efforts of foresters, rangers, and wardens of the Commission of Forestry. Some 925 programs were held in the fifth and sixth grades where either schoolyard demonstrations of fire control equipment and suppression techniques, or color slides were shown to help bring the conservation story to the classroom. In these two grades alone, some 43,455 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slides programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations mentioned above, all third grade children throughout the state (numbering more than 70,000) received a copy of the booklet "Smokey Bear's Story of the Forest," with a color sheet listing what everybody should remember about "Outdoor Good Manners," including forest fire prevention.



Today's Tiny Trees — Tomorrow's Forests

IN YOUR HANDS

Help Prevent Woods Fires

The original hand and little tree photograph taken by the Commission of Forestry in 1951 was again featured on the Commission's 1960 wall calendar. The photo has had wide use nationally and internationally in magazines and publications of various kinds over the past nine years.

Three additional color sheets were given to each second grade student and a copy of the comic book "Smokey the Bear—His True Life Story" was given to each fourth grade student in the state.

Some 452 movie showings were made in school auditoriums, bringing forest conservation information to 54,565 students of all grade levels.

The Commission's school programs are designed to build a stronger and more appreciative community of the future by giving basic instruction and information to our children on the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

FORESTRY DEMONSTRATIONS

During the year 7,881 persons attended 219 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation control of undesirable species and timber stand improvement.

Demonstrations are effective ways of getting forestry information to people and can do much to help make it possible to grow an appreciably greater amount of valuable timber on the 12 million acres of forest land in the state.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson College Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies and organizations cooperated to make the observance of 1959 Arbor Day and Conservation Week a real success. South Carolina law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 55,000 copies of a special folder were printed and distributed to schools and other interested groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs include tree planting exercises.

A total of 442 Conservation Week and Arbor Day programs were reported, with 67,689 persons attending.

FIRE PREVENTION ROADSIDE SIGNS

New roadside signs were erected wherever older signs needed replacement. The signs continued to carry the three messages in the following sequence: **USE YOUR ASH TRAY — HELP PREVENT WOODS FIRES—PROTECT LITTLE TREES, KEEP S. C. GREEN.** First erected in February 1953, the fire prevention roadside signs appear on main highways throughout the state. The Commission hopes to be able to intensify this project from year to year by providing additional signs along intermediate highways where thousands of motorists will see these forest fire prevention reminders as they travel the highways.

MOTION PICTURES

Motion pictures are a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 63,053 people saw motion pictures on forestry at 643 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

Since 1930, when forestry was added as a course of study in vocational agriculture classes in South Carolina, the Vocational Agriculture staff of the State Department of Education and the State Commission of Forestry have worked very closely in emphasizing the importance of the conservation of our forest resources to the future farmers of the state.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many students have home forestry projects. They plow firebreaks, plant seedlings, thin crowded stands, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes. Commission Foresters and Rangers are available to assist vocational agriculture classes with talks, demonstrations, and field work on forestry, and also provide filmstrips, motion picture films, booklets, posters, and other aids for teaching forestry.

The Forestry Commission sponsors an annual FFA and NFA Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1959-60 school year awards were presented to the winning FFA and NFA Chapters in each Vocational Agriculture District as follows:

DISTRICT I—FFA

- (1) Cleveland FFA Chapter
- (2) Wren FFA Chapter

DISTRICT II—FFA

- (1) Fort Mill FFA Chapter
- (2) Jonesville FFA Chapter

DISTRICT III—FFA

- (1) Johnston FFA Chapter
- (2) Gilbert FFA Chapter

DISTRICT IV—FFA

- (1) Walterboro FFA Chapter
- (2) Ehrhardt FFA Chapter

DISTRICT V—FFA

- (1) McBee FFA Chapter
- (2) Hannah FFA Chapter

DISTRICT VI—FFA

- (1) Andrews FFA Chapter
- (2) Wampee-Little River FFA Chapter

DISTRICT III—NFA

- (1) Riverside NFA Chapter
- (2) Twin City NFA Chapter

DISTRICT IV—NFA

- (1) Voorhees NFA Chapter
- (2) Baptist Hill NFA Chapter

RESOURCE-USE EDUCATION

To stimulate the teaching of conservation at various grade levels in the schools of the state two workshops were held for elementary and high school teachers during the year. Commission personnel provided instruction in forestry and the use of state park facilities in resource-use education workshops held at the University of South Carolina and at Clemson College.

In addition to the workshops mentioned above, forestry and state park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation. Particular emphasis was again placed on state park trails as effective "outdoor classrooms" for studying the many interrelated factors that go to make a good conservation education program.

The resource-use education movement has stimulated interest in the out-of-doors as an aid to effective teaching, and provides an excellent opportunity for teaching conservation concepts.

The first meeting of the South Carolina Advisory Council on Conservation Education was held on June 16, 1960. A representative of the State Commission of Forestry attended along with members of other conservation agencies and groups, State Department of Education, teachers and others. A steering committee was chosen by the group to draw up a plan of organization.

The Council accepted as its first activity an analysis of the current status of conservation education in South Carolina.

Each group or agency was assigned the job of preparing a report on its present conservation education activities, listing groups with which they are working and showing results as evidenced by changed behavior. Each group will also prepare lists of materials and aids which it has available for conservation education including printed material, slides, films, filmstrips, tapes, human resources, etc. These reports will be presented to the group at the next meeting to plan ways to coordinate and increase the effectiveness of conservation education in South Carolina.

TALKS

Personnel of the State Commission of Forestry give talks on all phases of forestry and state parks before many groups. The use of color slides with many of the talks help make them much more interesting and more effective.

During the year a total of 325 talks were made by Commission personnel to 10,099 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. Foresters, Park Superintendents, Rangers, Wardens, Tractor Operators, Tower Operators, and other Commission personnel play an important part in the Commission's information and education program. As one example of the number of people reached, during the past year 13,472 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting, and preventing fires was usually explained or demonstrated.

EXHIBITS

The Forestry Commission welcomes the opportunity to place exhibits in fairs and other places where educational forestry and state park displays are requested. Exhibits provide an excellent means of placing forestry and state park information before the people.

During the year the Commission cooperated with the Forestry Committee of the State Bankers Association and with International Paper Company, West Virginia Pulp and Paper Company, and Union Bag-Camp Paper Corporation in placing exhibits in interested banks throughout South Carolina.



Smokey Bear, dressed as a magician, points to the "magic" in a tree. Different forest products pop into view out of the stump when Smokey raises his wand.

Throughout South Carolina personnel of the Commission of Forestry placed exhibits at 94 locations which were seen by an estimated 1,181,635 citizens of the state.

The following is a record of where forestry and state park exhibits were displayed:

Exhibits at State and County Fairs

Location of Exhibit—County Fair	Type of Exhibit	Estimated Attendance
Easley	Weather Station	20,000
McCormick	Prevention Translite	4,800
Abbeville	Prevention Translite	6,000
Greenville	Prevention Translite	36,000
Camden	Common Woods of South Carolina	12,000
Bishopville	Management Translite	9,000
Orangeburg	Judge Smokey Diorama	15,000
Marion	Management Translite	11,000
Chester	Prevention Translite	4,700
Greenwood	Judge Smokey	45,000
Chesterfield	Management Translite	7,000
Anderson	Judge Smokey Diorama	60,000
Laurens	Common Woods of South Carolina	24,000
Chester (N)	Prevention Translite	2,500
Rock Hill	Planting Translite	19,000
Florence	Judge Smokey—Elephant "Get on the Ball".....	70,000
Sumter	Judge Smokey—Elephant "Get on the Ball".....	30,000
Lancaster	Planting Translite	12,000
Anderson (N)	Judge Smokey—Elephant "Get on the Ball".....	30,000
Newberry	Judge Smokey Diorama	20,800
Union	Planting Translite	30,000
Moncks Corner	Forest Management—Fire Prevention	5,000
Beaufort	Management Translite	9,000
Charleston	Judge Smokey Diorama	35,000
Loris	Management Panel	5,000
Bennettsville	Common Woods of South Carolina	5,000
Charleston (N)	Judge Smokey Diorama	10,000
Marion	Common Woods of South Carolina	7,000
		544,800
State Fairs		
Columbia	Forest Products	150,000
Columbia (N)	Forest Products	95,000
		245,000

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

Lancaster (Public Library)—Native Trees of Lancaster County	5,000
Columbia (Fire Prevention Parade)—Big & Little Smokey w/ Ranger's Truck.....	50,000
Camden (Flower Show)—Common Trees of South Carolina	1,500
Bishopville (Court House)—Common Diseases of South Carolina Trees	4,000
Darlington (Coop. Electric Fair)—SPCA Exhibit	5,000
Lake City (Christmas Parade)—Fisherman Float	5,000
Florence (Guaranty Bank)—Insect Panel	2,000
Conway (Horry Coop. Electric Fair)—Management Panorama	10,000
Aynor (Christmas Parade)—Smokey Bear w/Ranger's Truck	5,000
Marion (Coop. Electric Fair)—Management Panorama	2,000
Bennettsville (Marlboro Elect. Coop. Fair)—SPCA exhibit	4,000
Bennettsville (Court House)—Common Trees of South Carolina	2,000
Georgetown—Conservation	5,000
Calhoun Falls—Fire Control & Management	500
Donalds—Management	300
Edgefield—Fire Control	150
Winnsboro—Fire Control	1,000
Hodges—Management & Fire Control	450
Barnwell (Salkehatchie Elec. Fair)—Judge Smokey Diorama	3,500
Branchville (Parade)—Fire Control Equipment	1,000
Bowman (Parade)—Smokey Bear w/Ranger's Truck	2,500
Williston (Parade)—Smokey Bear w/Ranger's Truck	3,500
Leesville (Bank)—Forest Management Exhibit	500
New Ellenton (Parade)—Smokey Bear w/Ranger's Truck	3,300
Orangeburg (Court House)—Forest Management	200
Orangeburg (Court House)—Insect Display	500
Rock Hill (Nature Museum)—Fire Prevention	600
Anderson (S. C. Nat'l Bank)—Fire Prevention	7,000
Belton (S. C. Nat'l Bank)—Fire Prevention & Forest Management	12,000
Seneca (S. C. Nat'l Bank)—Fire Prevention & Forest Management	3,000
Pickens (S. C. Nat'l Bank)—Fire Prevention & Forest Management	2,100
Gaffney (Bank of Gaffney)—Fire Prevention & Forest Management	3,800
Gaffney (Merchants & Planters Bank)—Fire Prevention	2,800
Gaffney (Nat'l Bank of Gaffney)—Forest Management	1,400
Greer (Bank of Greer)—Forest Management	3,600
Travelers Rest (Bank)—Fire Prevention & Forest Management	2,800
Pickens (Bank)—Fire Prevention & Forest Management	3,200
Easley (Carolina Nat'l Bank)—Forest Management	2,000
Spartanburg (C. & S. Nat'l Bank)—Forest Management	24,000
Union (Commercial Nat'l Bank)—Forest Management & Fire Prevention	2,000
St. Matthews (Tri-County Elec.)—Judge Smokey Diorama	3,500
Richland Co. (Dutch Fork Com. Fair)—Insect Display	2,000
Darlington (Darlington Southern 500 Parade)—Smokey Bear on Float	50,000
Pageland (Watermelon Festival Parade)—Smokey w/Ranger's Truck	25,000
Columbia (Arden School)—Smokey Bear Suit	500
Lake City (Fire Prev. Parade)—Smokey Bear w/Ranger's Truck	2,000
Florence (Fire Prev. Parade)—Smokey Bear w/Ranger's Truck	2,000
Manning (Christmas Parade)—Conservation	3,500
Holly Hill (Christmas Parade)—Smokey w/Ranger's Truck	5,000
Orangeburg (Christmas Parade)—Smokey w/Ranger's Truck	10,000
Cheraw (Christmas Parade)—Big and Little Smokey with Tractor	10,000
Dillon (Industrial Parade)—Smokey Bear Float	10,000
Saluda (Christmas Parade)—Smokey w/Ranger's Truck	1,200
Newberry (Christmas Parade)—Smokey w/Ranger's Truck	5,000
Lexington (Christmas Parade)—Smokey Bear w/Ranger's Truck	7,500
Olanta (Christmas Parade)—Smokey Bear w/Ranger's Truck	6,000
Allendale (Christmas Parade)—Smokey Bear w/Ranger's Truck	7,500
Barnwell (Christmas Parade)—Smokey Bear w/Ranger's Truck	4,500
Society Hill (Christmas Parade)—Smokey Bear w/Ranger's Truck	20,000
Denmark (Christmas Parade)—Smokey Bear w/Ranger's Truck	3,000
Florence (Christmas Parade)—Smokey Bear w/Ranger's Truck	25,000
Asheville, N. C. (Carolina Lumber & Bldg. Supply Assn.)—Commercial Woods of South Carolina	1,185
Clemson (Farmers Week)—Forest Management	4,000
Hampton (Agriculture Bldg.)—Forest Insect Display	250
Total	396,835
GRAND TOTAL	1,186,625

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperated generously with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, and on the educational and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations. Radio stations serve the public exceptionally well by giving warnings, particularly during periods of high fire danger, and by giving tips on how to prevent fires.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that a total of 304 radio and TV programs on state parks and forestry were presented during the year. This number does not include, however, the many hundreds of recorded programs and film spots carried by radio and television stations, as made available through the Cooperative Forest Fire Prevention Campaign, and spot announcement material prepared by the Commission of Forestry for special use during periods of high fire danger.

TRAINING

A year-round program of training is conducted by the Commission of Forestry to make more effective the work of the Commission's personnel in carrying out the information and education job. The Commission continually strives to improve its educational techniques and methods. A good training program makes more effective and interesting every news release, every program, talk, and slide lecture used to promote better conservation practices throughout the state. An effective job of selling follows only after an effective program of training. Whether he is a forester in the central office, the district office, or a county ranger or warden in the county, or a superintendent or ranger in the state park system, participating in the Commission's over-all training program is an important part of his efforts to serve the public and carry out the functions of the Commission of Forestry.

NEWS RELEASES AND ARTICLES

Newspapers provide opportunities to present the conservation education program of the Commission and excellent press cov-

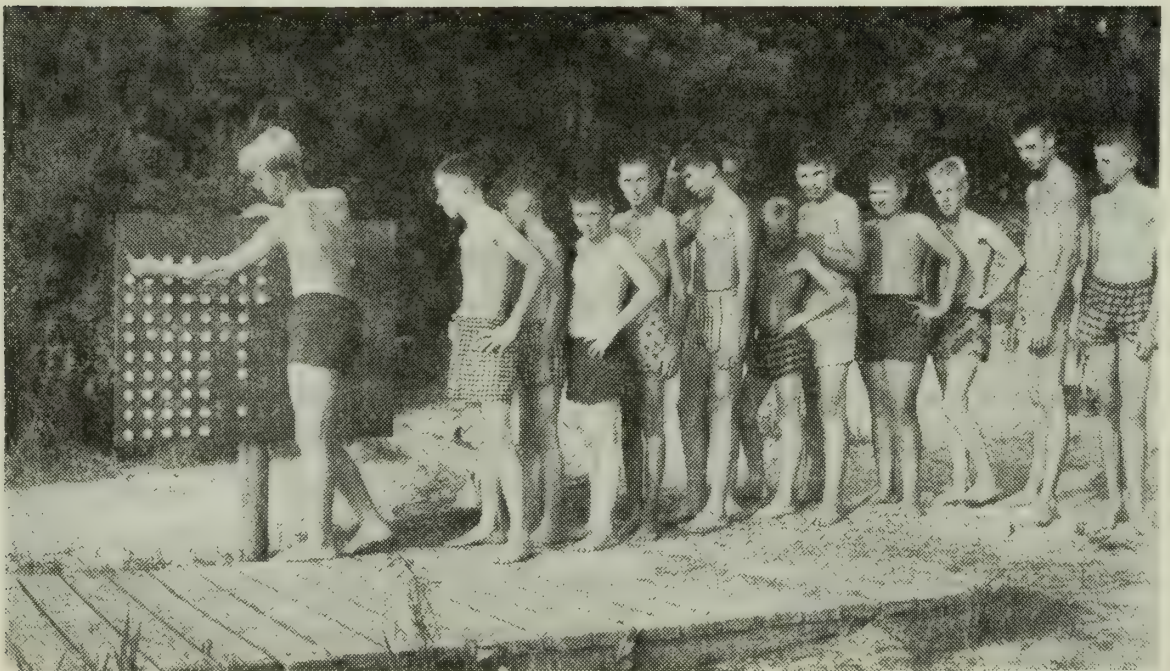
erage helped place forestry and state parks news before the people regularly.

During the year Commission personnel prepared 540 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, especially during serious fire situations, news items are given orally to individual papers and to the wire services.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or prepared mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

BOYS' FORESTRY CAMP

The thirteenth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period July 25-30. Eighty-nine young men representing every county in the state attended the week-long camp. One boy from each county was selected by each county ranger from postal cards written by boys interested in attending the camp.



A lifeguard and a "buddy board" at the camp swimming area helps keep track of the boys as they enjoy a swim after a day of instruction at Boys Forestry Camp.

On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of

Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and recreation characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by state parks.

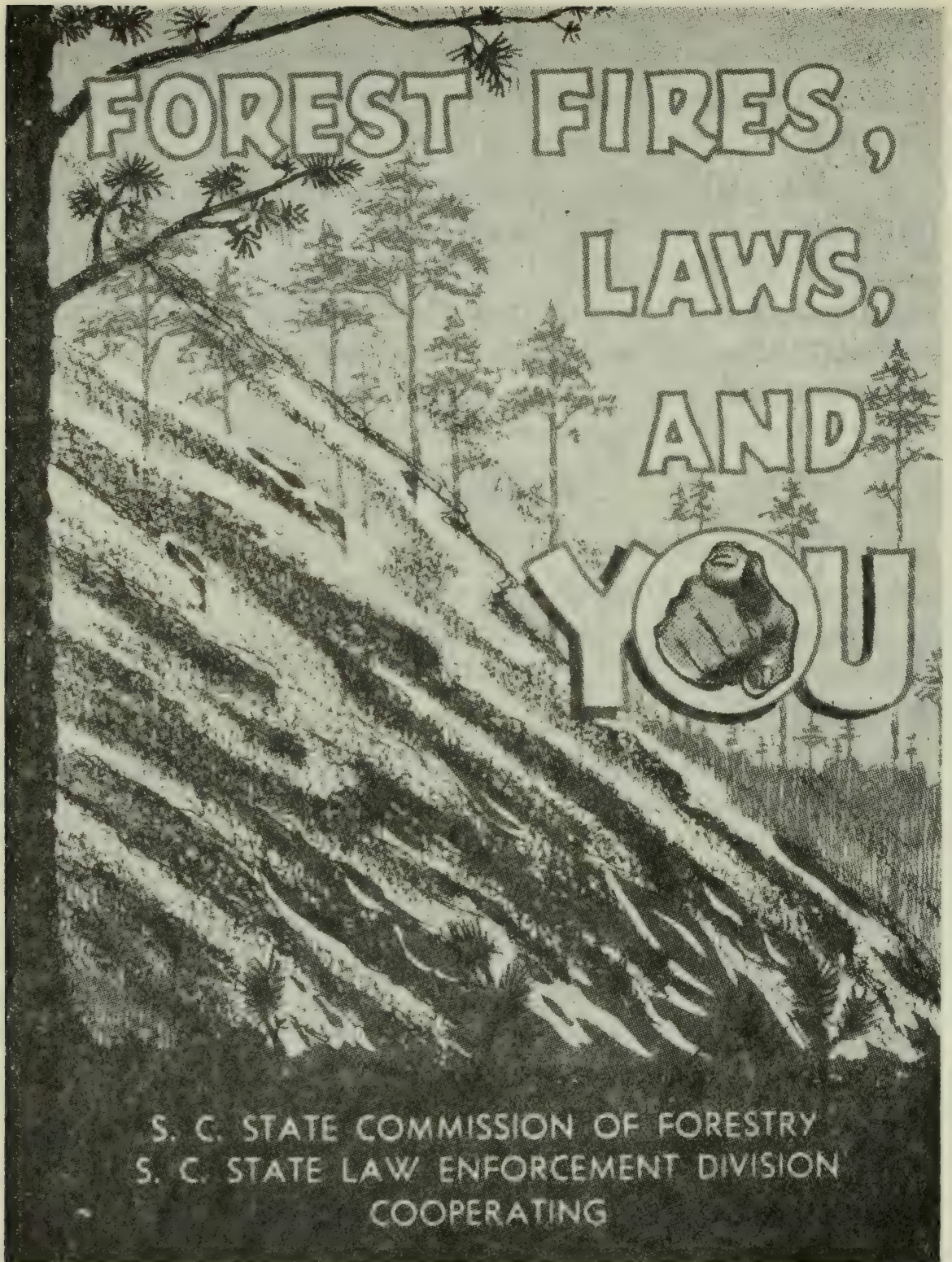
PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies and associations, and other organizations, groups, and agencies who published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

One of the publications issued by the Commission during the year is a fourteen page booklet entitled "Forest Fires, Laws, and You." This was published by the S. C. State Commission of Forestry with the cooperation of the S. C. State Law Enforcement Division. The booklet, illustrated in three colors, presented all the fire laws, both state and local, in simple form. Wide distribution has been made to many people, including educators and law enforcement officers.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry



A new fire law booklet with the help of illustrations presents simply the forest fire laws and responsibilities of the people of South Carolina.

and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park installations with the Commission of Forestry. The Commission's exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. The members of the S. C. Tree Farm Committee are:

Chairman—

H. F. Lathrop, Lightsey Brothers, Miley

Members—

Joe Youorski, Champion Paper and Fiber Company, Newberry

Harvey Rhettberg, Poinsett Lumber and Mfg. Co., Pickens

H. F. Bishop, Consulting Forester, Marion

C. P. Key, Lodge

T. M. Folger, Taylor-Colquitt Company, Spartanburg

Charles H. Flory, State Forester, Columbia

George B. Nutt, Clemson Agricultural College, Clemson

James Chester, District Manager, AFPI, serves as Secretary to the State Tree Farm Committee.

As of June 30, 1960, there were 309 Tree Farms in the state comprising 1,784,260 acres.

Names of landowners certified during the past year are marked with an asterisk on the following list of South Carolina Tree Farmers:

SOUTH CAROLINA TREE FARMERS

NAME—ADDRESS	Certified Tree Farm Acreage
Mrs. Walter C. White, Stateburg	5,500
McBride Dabbs, Mayesville	2,960
J. T. Johnson, Lynchburg	100
C. M. Leonard, Camden	5,500
D. G. Lesslie, White Oak Farm, Rt. 2, Rock Hill	205
Corey P. Key, Lodge	804
M. P. Howell, Jr., Route 1, Ruffin	2,400
Poinsett Lumber & Manufacturing Co., Pickens.....	68,451
C. E. Bullard, Early Branch	180
Wade C. Harrison, Rt. 2, Troy	3,400
W. D. Summer, Rt. 2, Newberry	70
Dr. C. L. Stevens, Campobello	163
Frank E. Timmerman, Edgefield	400
Joe L. Tolbert, Ninety Six	4,050
Pegues Family, RFD, Bennettsville	1,700
F. E. Cox, Rt. 2, Bennettsville	1,300
Tilghman Lumber Co., Marion	11,399
A. H. Rogers & Sons, Society Hill	550
Benton D. Dargan, Rt. 3, Darlington	1,000

NAME—ADDRESS	Certified Tree Farm Acreage
S. B. Huff, Rt. 2, Piedmont	75
G. L. Williamson, Rt. 1, Florence	800
Mrs. H. B. McCall, Effingham	1,000
Koppers Co., Inc., Wood Preserving Div., Charleston	9,474
E. B. Hare, Star Route, Westminster	60
Dixie Clay Co., Bath	1,600
John Tatum, Bamberg	300
J. F. Meares, Rt. 1, Nichols	200
H. N. Cousar, Rt. 1, Latta	500
Landon Thomas, 2226 Pickens Rd., Augusta, Ga.	515
J. R. Hawkins, Lykesland	110
Mrs. S. B. McMaster, 1900 Heyward St., Columbia 5	2,900
Mr. and Mrs. E. M. Harris, Bennettsville	275
S. J. Chandler, Minturn	400
J. B. Heins, Blythewood	85
J. Lamar Brantley, Manager, Good Hope Corporation, Ridgeland	12,000
International Paper Co., Southern Kraft Division, Georgetown	393,971
Mrs. E. M. and McIver Williamson, Mont Clare	1,225
George Roberts, Pineland	220
Oscar Wigington, Salem	5,181
Union Bag & Paper Corp., Savannah, Ga.	108,894
Champion Paper and Fiber Co., Newberry	110,256
J. H. A. Carter, Lodge	200
Niles C. Clark, Waterloo	630
S. W. Mims, Route 1, Harleyville	1,600
A. W. Murray, 2203 Johnston St., Newberry	4,684
E. F. Conger, Box 149, Staunton, Va.	3,210
West Virginia Pulp & Paper Company, Georgetown	443,904
Ferdinand Gregorie, Mt. Pleasant	525
F. W. Atkinson, Rt. 4, Augusta, Ga.	125
Duke Power Company, Charlotte 1, N. C.	61,500
R. C. Kinard, Islandton	1,800
Homer Saunders, Rt. 3, Walterboro	3,500
E. Heyward Benton, Rt. 4, Walterboro	75
E. D. Kinard, Islandton	268
M. W. Wise, Elko	187
L. W. Anderson, Box 432, Williston	860

NAME—ADDRESS	Certified Tree Farm Acreage
Graniteville Company, Graniteville	15,550
O. L. Warr, Rt. 2, Timmons ville	200
E. V. Golding, Waterloo	135
J. T. Squires, Rt. 3, Latta	285
D. H. Sullivan, Box 115, Lexington	149
Continental Can Co., Augusta, Ga.	101,990
C. A. Harper, Estill	4,000
Bruce Harter, Fairfax	450
Dunbar Oswald, Rt. 2, Allendale	700
Guy V. Whitener, College St. Extension, Newberry.....	1,847
Ben Alderman, Alcolu	1,680
Mrs. Gertrude C. Floyd, Manning	445
G. M. Bagnal, Rt. 3, Manning	40
M. Earl Stone, Rt. 1, Saluda	194
F. M. and M. S. Dwight, Eastover	144
Olin J. Kinsler, Rt. 1, Columbia	205
A. J. Lever, Rt. 1, Columbia	112
J. D. Peeples, Early Branch	308
Kendall Mills—Wateree Division, Camden	450
James L. Sweat, Boykin	522
H. Gates Lloyd, Haverford, Pa. & Richard W. Lloyd, 1707 Lyttleton St., Camden	2,993
R. W. Lloyd, 1707 Lyttleton St., Camden	1,381
Cypress Woods Corp., Ridgeland	20,000
Brooks B. Weber, Rt. 5, Union	800
Holliday Brothers, Galivants Ferry	2,000
W. H. Manning, Jr., Barnwell	549
Toumey Hospital, Sumter	3,150
George Patrick, Bowman	700
Anthony Fogle, Neeses	140
Union Memorial Presbyterian Church, Rt. 1, Winnsboro	425
Thomas W. Timms, Rt. 1, Box 60, Winnsboro.....	400
Cragmoor Farms, Moore	1,000
J. P. Brunson, Sr., Darlington	468
Eastover School, Eastover	5
William H. Wicker, University of Tennessee, Knoxville, Tennessee	586
P. T. Harris, Silverstreet	200
William E. Senn, Newberry	135

NAME—ADDRESS	Certified Tree Farm Acreage
G. B. Reagin Est., Rt. 4, Newberry	250
Dr. J. E. Grant, 1817 Lindsey St., Newberry	197
E. Guy Foster, McConnells	400
Charlton DuRant, Manning	229
E. E. Dargan, Conway	10,060
J. Porter Gaston, Richburg	155
J. T. Clinkscales, Rt. 1, Abbeville	370
Charles B. Abell, Lowrys	440
Dr. Stanley C. Baker, Greenwood	100
Misses Nora and Mae Davis, Troy	181
W. R. Cothran Estate, 312 Grace St., Greenwood	490
J. Hearst Coleman, 248 Jennings Ave., Greenwood	400
Frank J. Wideman, 1366 National Press Bldg., Wash- ington, D. C.	273
C. Cooper Sanders, Jr., and Howard P. Mabry, Green- wood	106
David Dows, Bradley	1,100
Henry G. Ligon, Rt. 2, Easley	24
J. B. Guess, Jr., Denmark	1,000
W. W. Woolsey, Montmorenci	500
Samuel H. Swint, Graniteville Company, Graniteville	327
Mrs. Margaret H. Lloyd, Camden	800
Mrs. V. T. Chastain, Box 897, Hampton	317
Willie Reed Bishop, Rt. 4, Walterboro	100
R. C. DeLoach, Furman	405
Mrs. Annie M. Pinckney, 1006 Henderson St., Columbia	250
C. J. Cate, Jr., 129 S. Waccamaw, Columbia	455
John C. Billingsley, 924 Fair St., Newberry	111
J. Roy Cunningham, Rt. 6, Lancaster	300
Clyde D. Ware, Rt. 2, Iva	48
H. F. Bishop, 316 Woodland Drive, Marion	168
Vance Perritt, Mullins	60
F. C. Edge, Mixonville	95
A. D. Strickland, Rt. 3, Loris	100
H. L. Bellamy, Wampee	25
J. M. Huber Corp., Langley	1,854
J. Ansel Caughman, Rt. 2, Leesville	1,200
G. E. King, McBee	950
R. D. King, McBee	270

NAME—ADDRESS	Certified Tree Farm Acreage
Marlin H. Bruner and W. C. Nettles, Clemson	415
Marlin H. Bruner, Clemson	104
A. C. Flora, 1511 Hagood Ave., Columbia	204
St. Clair Davis, Marion	250
Frank H. Covington, 311 Fayetteville Ave., Bennettsville	100
Helen S. Tiencken, 4009 Fessenden St., N. W., Wash- ington 16, D. C.	297
Stewart C. Hope, Agent, 3350 Millwood, Box 5054, Columbia	505
Dr. R. N. Kennedy, 15 E. Jones Street, Savannah, Ga.	264
Mrs. Sarah Goggans, Newberry	562
T. C. Jeter, 252 Sims Ave., Columbia	108
Dr. W. G. Gamble, Jr., 2010 Fifth Avenue, Bay City, Michigan	842
J. L. Mason, Clarks Hill	2,211
Atlantic Coast Line RR Co., Wilmington, N. C.	376
W. H. Bradford, Rt. 4, Sumter	200
H. M. Hentz & Son, Box 181, Newberry	8,434
Hampton & Branchville RR Co., Inc., Hampton	4,902
Edward Duckworth, 1126 Douglas St., Newberry	44
Horace T. Oxner, Rt. 2, Saluda	107
Vance & Dwiggins Co., Newberry	783
J. T. Strahan Co., Port Wentworth, Ga.	1,655
Lightsey Bros. Lumber Co., Miley	39,584
Mrs. Sidney Legendre, Mt. Holly	6,410
Hubert Boyd, Clinton	873
J. B. Frazier, Jr., and J. B. Frazier, III, Winnsboro	669
T. B. Amis, Box 71, Newberry	650
Mrs. T. A. Black, Sr., Rt. 2, Box 2, Ruffin	1,131
Bess Caldwell Bursinger, 2006 Luther St., Newberry	506
Albert G. McCaughrin, 1208 Calhoun St., Newberry	38
B. Hardin Keitt, 200 Hassel Place, Charlotte 7, N. C.	874
J. Peter Grace, Jr., 7 Hanover Square, New York, N. Y.	12,700
R. L. Fairey, Jr., Rowesville	121
Dr. M. D. Farrar, 129 Folger St., Clemson	168
Thomas D. and Christine M. Hinkle, Sunset	225
Stiles M. Harper, Estill	2,654
Guy V. Whitener, Jr., E. Wells Park Drive, Newberry	389
Luke Winchester, Sunset	2,846

NAME—ADDRESS	Certified Tree Farm Acreage
J. B. Frazier, III, Winnsboro	180
Dr. G. W. Cunningham, Laurens	114
G. S. Carter, Jr., Heriot St., Charleston 31	1,183
Floride M. and William Glover, Willowbank, Georgetown	70
Atlantic Creosoting Co., Inc., 17 Battery Place, New York 4, N. Y.	3,764
Vestal Lbr. & Mfg. Co., Knoxville, Tenn.	5,922
W. W. Smith, Andrews	4,482
R. J. Makela, 530 W. Church St., Bishopville	981
D. L. Brown, 118 Harvard Drive, Spartanburg	89
Sam Hardin Smith, Rt. 3, Loris	290
Flack-Jones Lumber Co., Inc., Moncks Corner	3,200
J. D. Martin, Box 395, Summerville	300
C. Hutt Shelley, Nichols	433
Robert Kennerley, Newberry	65
R. M. Cooper & Archie Beattie, Wisacky	628
Est. of Susan Guignard (R. Sanders Guignard, Trustee), Parkland Inc., Cayce, S. C.	2,760
Phillip R. Freeman, Oakland, Calif.; Mrs. E. C. Coker, Clemson; Mrs. B. W. Porter, New Orleans, La.	4,819
Porcher G. Rembert, Rt. 2, Box 45, Sumter	100
H. Chr. Sonne, 15 Exchange Place, Jersey City 2, N. J.	9,500
Ellis Est. (H. H. Ellis, Agent), Rt. 5, Saluda	100
James Bledsoe, RFD, Saluda	15
H. T. Anderson, Macon, Ga.	410
Wade Hampton Cobb, 1215 Anthony Ave., Columbia	70
Weyman Coleman, Rt. 5, Saluda	1,000
Calvin Rivers, Chesterfield	1,700
H. W. Merck, Rt. 2, Bishopville	166
Robt. J. Maxwell, Jr., 239 N. Main St., Greenville	80
Dr. L. W. Anderson, Williston	1,200
W. C. Ellis, Jr., Rt. 4, Abbeville	291
Holly Hill Lbr. Co., Holly Hill	11,270
O. H. Wienges & Son, St. Matthews	2,437
Miss Stella M. Ruff, Jenkinsville	72
B. F. Williamson, Rt. 3, Darlington	1,700
Dr. W. T. Martin, 605 McDaniel Ave., Greenville	125
William A. Douglas, Georgetown	33
Leger R. LaBruce, Georgetown	176

NAME—ADDRESS	Certified Tree Farm Acreage
Norman G. Sifly, Orangeburg	120
Fred Norris, Eutawville	495
A. B. Chace & M. G. Chace, Jr., Providence, R. I.	9,224
A. B. Chace, Providence, R. I.	2,577
Ben R. Wall, Jr., Chester	724
James A. Burden, Aiken	3,333
J. Cecil Berly, Pomaria	460
Raymond Booth, Aynor	60
S. A. Cooler, Walterboro	1,311
Boyd Jacobs, Georgetown	125
M. H. Jacobs Estate, Kingstree	1,988
Roscoe M. Hinson, Kingstree	534
P. T. Mace, Gresham	1,797
T. C. Coxe, Jr., Darlington	17,500
Robert Nichols, Conway	185
Mrs. L. Jennie Cottingham, Dillon	341
F. R. Hemingway, Kingstree	87
Clyde Booth, Conway	288
Miss Rebecca Bryan, Conway	992
Mrs. Oline W. Smith, Georgetown	23
Canal Wood Corp., Conway	1,620
Paul & E. B. Sanders, Ritter	3,943
J. L. Aiken, Pickens	42
J. H. Fair, Jr., St. Matthews	610
Jacob R. Rogers, Dillon	408
Lucas M. Dargan, Darlington	110
W. E. & L. M. Dargan, Darlington	420
Dr. A. M. Rose, Jr. and Lucile R. Deal, Marion	513
Dixon Tire Service, Lancaster	210
Miss Virginia Gourdin, Charleston	674
B. A. Fretwell, Newberry	150
Carolina Tree Farms, Inc., Newberry	552
J. W. Yonce, Jr., Johnston	150
Randolph Watson, Anderson	925
Don Watson, Blaney	42
B. W. Crouch, Saluda	120
Mrs. Dorothy G. Dial, 819 Woodland Dr., Columbia.....	280
Dr. Frank C. Smith, 106 W. 7th St., Charlotte 2, N. C.....	225
John E. Nisbet, Route 1, Lancaster	490

NAME—ADDRESS	Certified Tree Farm Acreage
Oline W. Smith, Box 305, Georgetown, and S. O. Walters, Clemson Ave., Columbia	60
J. Ryan Jeter, Santuc	325
Erland Nelson, 1921 York Drive, Columbia	270
Mrs. Naida Nelson, 1921 York Drive, Columbia	67
R. A. Stevenson, Route 1, Richburg	1,219
C. C. Hare, Star Route, Westminster	87
V. M. Faircloth, Box 64, Andrews	117
T. B. Castles, 116 Brawley Street, Chester	152
Henry Savage, Jr., Box 234, Camden	2,485
Joseph F. Havel, Pawleys Island	1,949
Dr. Harrison L. Peeples, Scotia	3,726
F. Hope Lever, Route 1, Columbia	87
Dr. Archibald Rutledge, Rt. 1, Box 47, McClellanville	2,000
J. D. Lane, Box 404, Marion	90
W. A. Coward, Aiken	960
W. W., R. R., and Betty Bruner, c/o First National Bank, Columbia	226
C. E. McDonald, E. College Street, Winnsboro	430
Lt. George T. Kneese, Jr., 1820 Millwood Rd., Sumter	185
H. R. Drake, RFD, Drake	2,100
Rogers M. Reid, Richburg	600
Fred Hambright, Rt. 4, Chester	250
Col. Felix T. Simpson, McConnells	576
P. M. Brown, Rembert	240
Margaret E. Hall, Rt. 2, Box 142, Camden	33
J. C. Oswald, Allendale	1,317
E. T. Kelly, Willowbank, Georgetown	2,800
J. C. Winn, Plum Branch	3,026
Anna S. and L. H. McCallum, Lugoff	550
*H. T. Oxner & J. H. Keener, Rt. 2, Saluda	183
*Robert E. O'Brien, Rt. 2, Pendleton	750
*Paul R. Gibson, Box 554, Fort Mill	77
*J. E. & J. A. Tyler, Wagener	2,390
*Robert M. Moore, Horatio	325
*Irwin M. Satterwhite, Sr.	300
*John D. Muller, Jr., P. O. Box 564, Charleston	775
*Arthur H. Parsons, Andrews	269
*A. B. Heins, Ridgeway	175

NAME—ADDRESS	Certified Tree Farm Acreage
*Indiantown Presbyterian Church, RFD, Hemingway	60
*F. E. Thurmond, RFD, Modoc	127
*Robert Ligon Garrison, Mgr., Rt. 3, Piedmont	43
*Miss Elizabeth Navarro, Kingstree	880
*Spencer Baird, Route 3, Batesburg	204
*David Baird, Route 3, Batesburg	100
*M. A. Kirkland, RFD, Ridgeway	1,536
*Mrs. Eloise C. Matthews, Box 425, Winnsboro	242
*James Howard Wilson, RFD, Blythewood	17
*John Roger Wilson, Blythewood	95
*J. S. & F. C. McGregor, Ruby	350
*Mrs. John D. Clark, Route 1, Blairs	765
*J. W. Coleman, Route 1, Latta	127
*Robert E. Darden, RFD 3, Orangeburg	143
*Edgar Barnhill, Route 5, Box 122, Conway	200
*S. D. Cox, Box 832, Conway	15
*Jocelyn Clark, Springhill Plantation, Ridgeland	3,395
*Fort Mill FFA Chapter, Box 206, Fort Mill	42
*James Roof, Gaston	400
*Beverly Herbert, Jr. & Georgia H. Hart, 712 Spring Lake Rd., Columbia	719
*Mrs. M. L. (Belinda) Scott, Box 271, Batesburg	138
*Mrs. Mary H. Taylor, 6230 Westshore Drive, Columbia and James H. Herbert, Delaplane, Va.	582
*Carl B. & Martha Scott Laurence, 6409 Noble Ave., Columbia	101
*A. H. & Mary Stokes, Spartanburg	575
*The Surety Life Ins. Co., Greenville	941
*Albert S. Nickles, Hodges	250
*Mrs. Betty W. Jeffords, 4107 Kennilworth Rd., Columbia	72
*P. L. Baughman, Hampton	294
*Harry N. Burgess, Silverstreet	198

STATE PARKS

CONSERVATION

"Conservation is not often associated with the built-up portions of our nation. Yet in this area of unbridled metropolitan expansion . . . we find ourselves the victims of our own accomplishments. Due to man's ineptitude, water and air often become polluted, floods run rampant, and the food supply itself is threatened. But perhaps most important of all, man's carelessness with nature destroys the best form of relief he has from the tensions of urban life. Natural open land is the ideal setting for rest and recreation."

Nature in the Metropolis

William A. Niering,
Connecticut

INTRODUCTION

The acquisition of the valuable seashore property of the Huntington estate in Georgetown County at the close of the 1959-60 fiscal year was a noteworthy occurrence. The event, along with the purchase of two significant historical sites, gives interesting substance to this annual report.



Huntington Beach, a 2,500 acre tract of ocean front property in Georgetown County, was leased to the state to be developed into an additional state park.

The 2,500-acre tract of ocean front property was leased to the state by the Brookgreen Trustees of the Huntington holdings. This magnificent area has all the potentials of a great natural recreational area.

The 1960 Legislature appropriated funds for the purchase of the Governor Gist Memorial and forty-one acres in Union County to be preserved by the state as a Confederate historical memorial.

On January 1, twenty acres at the site of the old colonial town of Dorchester, near Summerville, was leased from the West Virginia Pulp & Paper Company. Restoration work is underway at the town site, at the old Revolutionary Fort and at the ancient St. George Parish Church and cemetery.

Hurricane Gracie struck the South Carolina coast on September 29, 1959, and did severe damage to several state parks, principally Hunting Island. It was necessary to remove the downed and damaged timber from the areas. Fortunately, the receipts from the sale of the timber were authorized for use within the several state parks and considerable restoration work was accomplished.

The fishing pier at Myrtle Beach was moved to a new location approximately one-half mile south of the original site. This was done because of the increasing danger from jet planes of the Air Force Base. Fishing is equally as good as at the first location.

The general operation within the existing state parks was to a large degree routine. More than three million visitors continued to use the state parks for "health and recreation". This attendance indicates the importance of the service rendered by the state parks and will, no doubt, remain at this level until more parks are added or until facilities are expanded.

Twenty-two state parks are well distributed and so located that wherever you are in South Carolina, there is at least one state park within an hour's drive. This number of parks has been considered adequate for the present-day needs of our people. However, studies of expanding population figures and recreational demands in the years immediately ahead, make us realize that the acquisition of additional areas for future development is of prime importance. Although it may be necessary to wait a few years for the development of additional park areas, these tracts should become a part of the state park system now.

With increased leisure on the one hand, and the tension of our times on the other, state park values cannot be reckoned in dollars and cents, but they are nevertheless real and important values.

ATTENDANCE

For the past five years, since 1955, more than three million park visitors have been counted at the twenty white and five Negro areas.

For the first time visitation at Myrtle Beach, with 673,737 individuals, exceeded all other parks. Heretofore, Sesqui-Centennial has attracted the largest crowds. This year Sesqui registered 393,176 visitors. Hunting Island had 253,362 in white area and 49,602 in Negro area. Other parks with more than 200,000 visitors were Cheraw, Paris Mountain and Table Rock.

These visitors traveled in 752,585 cars, of which 140,768 bore out-of-state licenses.

There were a million-and-a-quarter picnickers and half-a-million swimmers.

A detailed table of attendance and use is included herein.

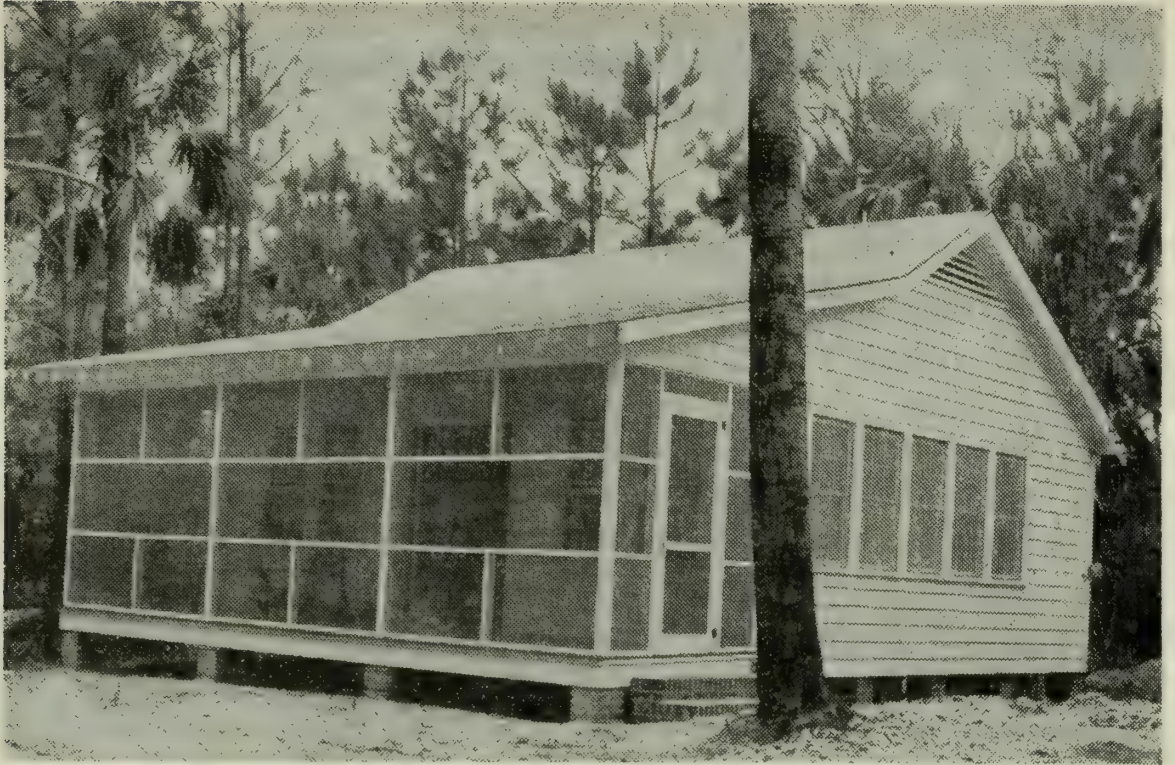
APPROPRIATIONS

The operating budget for the fiscal year 1959-60 totalled \$347,820, the same as the previous year. Appropriated funds are not keeping pace with facility use and are creating a build-up in delayed maintenance. This is unwise. An appropriation of from two to three per cent of the capital investment for repair and maintenance operation is a sound policy, or an annual overall appropriation of approximately \$385,000 is needed for good management and operations.

FAMILY VACATION CABINS

Family vacation cabins have long been an accepted facility in the state parks. For more than a generation South Carolinians have sought reservations of these cabins for summer vacations or week-end outings in the fall and spring.

The 67 cabins in nine state parks—located from the mountains to the seacoast—accommodated nearly a thousand white families during the year. The cabins for Negro families have received only limited use.



Vacation opportunities include 67 family cabins located in nine state parks where nearly one thousand families spend all or a part of their vacations each year.

Below is a table of the distribution of the cabins, with the number of cabins and their rentals.

Park—County	Cabins	Weekly	Out-of-Season Week-End
Cheraw—Chesterfield	9	\$24—\$36	\$ 9—\$15
Givhans Ferry—Dorchester	5	\$24	\$ 9
Hunting Island—Beaufort	4	\$42	\$18
Myrtle Beach—Horry	5	\$42	\$18
Oconee—Oconee	20	\$20—\$36	\$ 8—\$15
Poinsett—Sumter	6	\$24—\$42	\$ 9—\$15
Santee—Orangeburg	2	\$28	\$12
Table Rock—Pickens	12	\$24—\$44	\$10—\$24
Facilities for Negro Families:			
Hunting Island—Beaufort	2	\$35	\$12.50
Pleasant Ridge—Greenville	2	\$35	\$12.50

All cabins have electric lights, electric stoves, and electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin user must bring blankets, bed linens and towels, and silverware, such as knives, forks and spoons.

During the period June 1st through Labor Day summer rates are in effect and cabins are rented for a period of one week only. After Labor Day and through the following May cabins are available at reduced rates, and for week-end use. Many cabins are winterized and comfortable throughout the year.

To give every family an equal opportunity to obtain a cabin for a summer vacation, cabin assignments are made in a public

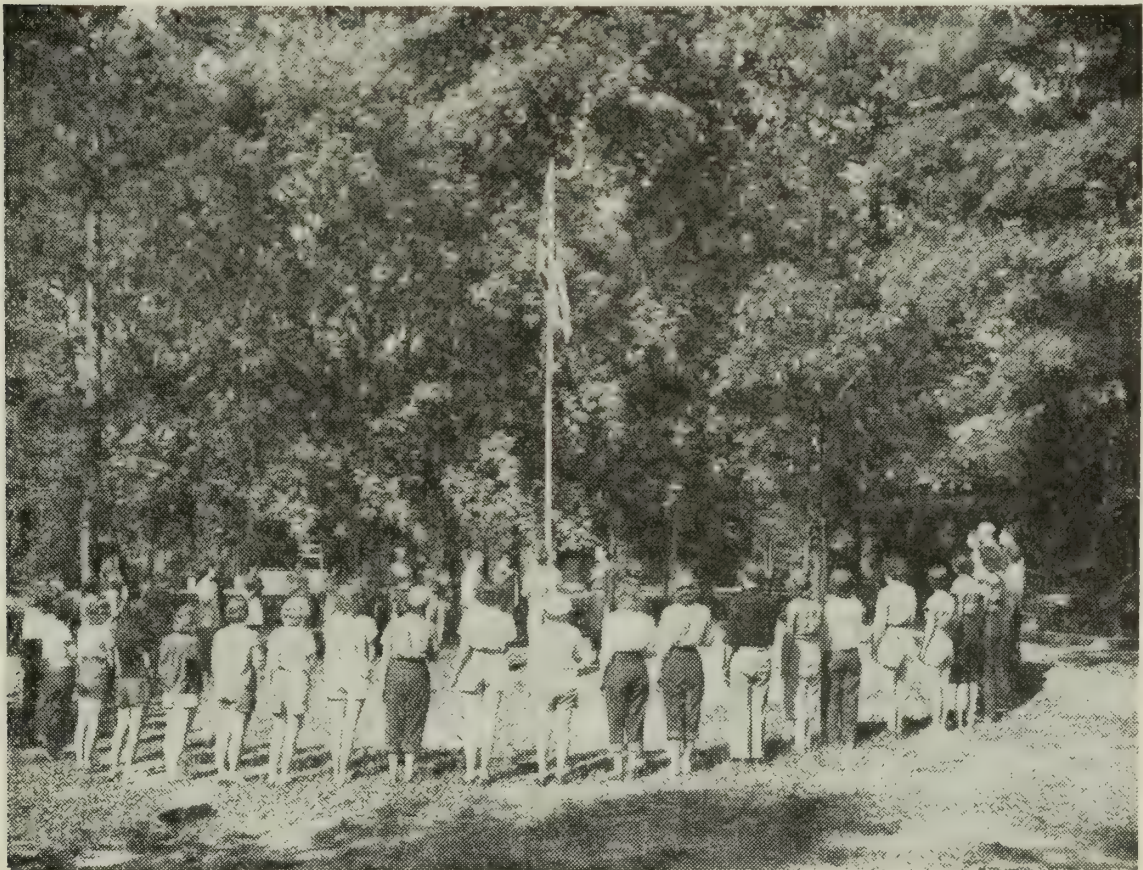
drawing. All South Carolina applications are considered first; then out-of-state requests are reviewed.

Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, Box 357, Columbia, S. C., and must be received in Columbia prior to March 1.

GROUP CAMPS

Seven group camps—six for white and one for Negro campers—located at four state parks, Paris Mountain, Cheraw, Kings Mountain and Poinsett, continue to supply the facilities for several thousand children seeking out-of-doors adventure. With a daily capacity of 600 campers and about 13 weeks in the summer season, some 54,000 camper days are counted at the seven areas. Church and school groups, Boy Scouts and Girl Scouts, YMCA's and YWCA's make up the greater portion of the use agencies. There is a rental charge of 35 cents per day, per person, for the camps which provide facilities for 42 to 140 campers.

Equipment and facilities are similar in all camps. The camps are used throughout the vacation season without any vacancies.



Seven group camps in four state parks with a daily capacity for 600 campers offer camping opportunities to organized camping groups.

Out-of-season use is limited, as facilities are not adapted to winter use.

TENT AND TRAILER CAMPING

The number of families seeking adventure in the great out-of-doors continues to increase and each year more and more spaces have to be added and new areas developed for the tent and trailer campers.

Family camping is a nationwide activity and continuing to grow. National and state parks play host to a great number of those on the move. South Carolina's state parks participated fully in this activity.

Sixteen state parks and one wayside area have designated areas for family camping with developed facilities such as water and electrical connections, tables, latrines and garbage collection.

The distribution of these facilities is shown in the following table:

FAMILY CAMPING AREAS AND FACILITIES

Park Location	FACILITIES								
	No. of Units	Flush Toilets	Showers	Electric Connections	Water Connection	Outdoor Grill	Picnic Tables	Miles to Gas and Grocery	Other Facilities
AIKEN—18 miles E. Aiken	4	*	*	X	X	X	X	3	1 2 3 4
BARNWELL—3 miles S. Blackville	8	X	*	X	X	X	X	2	1 2 3 4
CHERAW—4 miles S. Cheraw	12	X	X	X	X	X	X	2	1 2 3 4
CHESTER—3 miles SW Chester	6	X		X	X	X	X	2	2 3 4
COLLETON WAYSIDE— 12 miles N. Walterboro	4	X		X	X	X	X	1	2
GIVHANS FERRY—15 mi. W. Summerville	10	*	*	X	X	X	X	1	1 2 3
GREENWOOD—17 miles E. Greenwood.....	10	*	*	X	X	X	X	3	1 2 3
HUNTING ISLAND—16 mi. E. Beaufort ..	36	X	*	X	X		X	4	1 2
KINGS MOUNTAIN—12 miles N. York ...	20	X	X	X	X	X	X	1	1 2 3 4
LITTLE PEE DEE—12 miles S. Dillon	10	X	*	X	X		X	6	1 2 3 4
MYRTLE BEACH—3 mi. S. Myrtle Beach..	150	X	X	X	X		X	2	1 2
OCONEE—8 miles NW. Walhalla	20	X	*	X	X	X	X	2	1 2 3 4
POINSETT—18 miles SW. Sumter	10	X	X	X	X	X	X	5	1 2 3 4
RIVERS BRIDGE—6 miles W. Ehrhardt ..	10	X		X	X	X	X	5	1 2 3 4
SANTEE—5 miles W. Santee	10	X	*	X	X	X	X	4	1 2 3 4
SESQUI-CENTENNIAL—13 mi. NE. Col'bia	10	*	*	X	X	X	X	3	1 2 3 4
TABLE ROCK—16 mi. N. Pickens	26	X	*	X	X	X	X	4	1 2 3 4

SYMBOLS: x—"Yes"

*—Available at Bathhouse

1—Swimming

2—Fishing

3—Boating

4—Hiking and Trails

A "Unit" is a space designed to accommodate from two to six people.

Camping areas are "open" from 8:00 A.M. to 10:00 P.M. the year around.

Pets must be kept on leash.

No advance reservations.

CHARGES: Camping charge at above parks \$1.00 per day except at Myrtle Beach and Hunting Island which is \$1.25 per day, per unit. Limited camping facilities are available at 8 other areas at a cost of \$0.50 per day.

ACQUISITIONS AND DEVELOPMENTS

Since the first state park area was acquired in early 1934, twenty-one other areas have come into the South Carolina system of state parks “from the mountains to the sea”.

Cheraw was the first area acquired, but Myrtle Beach was the first to be ready to receive visitors—on July 1, 1936.

From the beginning, areas were planned and developed for both white visitors and Negro park users.

The table following gives names, acreages, locations, date of establishment or acquisition and date opened to visitors of the several state parks.

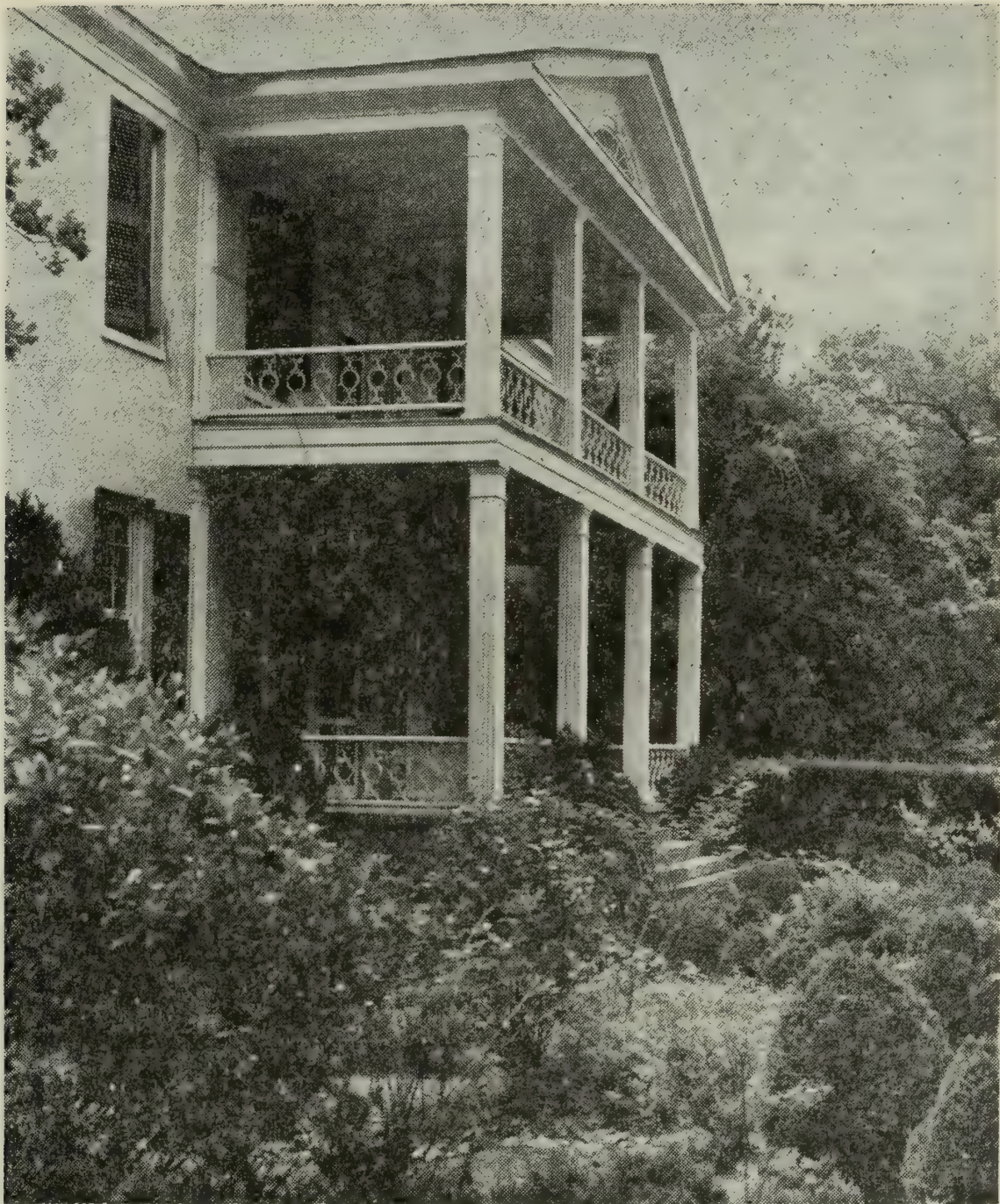
Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken	1,067	Aiken	July 1934	Aug. 1936
Andrew Jackson Historical..	360	Lancaster	April 1953	Mar. 1957
Barnwell	307	Barnwell	July 1937	Aug. 1939
Cheraw	7,361	Chesterfield	Mar. 1934	July 1939
Chester	523	Chester	May 1935	July 1939
Colleton Wayside	35	Colleton	May 1938	June 1940
Croft	7,135	Spartanburg	May 1949	June 1949
Edisto	1,255	Charleston Closed Feb. 1956....	Feb. 1935	June 1937
Givhans Ferry	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood	914	Greenwood	April 1938	July 1940
Hunting Island	5,000	Beaufort	July 1938	June 1941
Kings Mountain	6,141	York-Cherokee	Nov. 1934	June 1940
Lee	2,839	Lee	June 1935	June 1941
Little Pee Dee	835	Dillon	June 1951	June 1955
Myrtle Beach	312	Horry	Aug. 1934	July 1936
Oconee	1,165	Oconee	July 1935	June 1937
Paris Mountain	1,275	Greenville	April 1935	June 1937
Pleasant Ridge	300	Greenville	Sept. 1950	June 1955
Poinsett	1,000	Sumter	Aug. 1934	Aug. 1936
Rivers Bridge	390	Bamberg	May 1945	July 1945
Santee	2,364	Orangeburg	Jan. 1942	June 1949
Sesqui-Centennial	1,500	Richland	Aug. 1937	June 1940
Table Rock	2,860	Pickens	May 1935	June 1940
46,173				

HISTORICAL AREAS

Two new areas were added to the historical memorial section of the Commission with the acquisition of the Gist Mansion and Old Dorchester.

The Gist property, known as “Rose Hill” comprises forty-one acres and the restored “mansion” and was purchased from Mr. Clyde T. Franks of Laurens for \$25,000.

The three-story brick mansion, built in 1828, was the country home of William H. Gist, South Carolina’s Secession Governor. It is approximately ten miles south of the town of Union, near the Tyger River. The formal garden surrounding the house is famous for its roses and boxwood. The 15-acre grove of large



Rose Hill, the home of William H. Gist, South Carolina's secession governor, was acquired to be developed as a Confederate historical memorial.

hickory and oak trees lies between the house and County Road No. 16.

Restoration of certain streets, lots and parade ground of the old colonial town of Dorchester is underway. Repairs are being made to the tabby walls of the Revolutionary Fort, within the town, and on the bank of the Ashley River. Contract has been let to restore and make safe the crumbling ruins of the tower of St. George Parish Church, within the town limits. The town of Dorchester was founded in 1696 by a band of Congregationalists

from Dorchester, Massachusetts. The St. George Church was built about 1720 as a Parish of the Church of England. The Fort dates from the Revolution.

A dwelling will be constructed at the area so as to have a resident supervisor on the area. Restoration work will continue.

Memorials within the historic branch are:

<i>Name</i>	<i>County</i>	<i>Acreage</i>
Eutaw Springs Battleground	Orangeburg	2.7
Fort Watson Indian Mound	Clarendon	2.0
Gov. William H. Gist Mansion	Union	41.0
Old Dorchester	Dorchester	22.2
General Thomas Sumter Burial Ground.....	Sumter	5.0
		<hr/> 72.9

Other areas administered by the Division of State Parks but in private ownership are:

Burial Place of: General Francis Marion—Berkeley County
Colonel Isaac Hayne—Colleton County
Thomas Hayward—Jasper County

RECOMMENDATIONS

The Division of State Parks recommends:

- 1—A budget of approximately \$385,000 to adequately operate the several state parks and to adequately maintain equipment and facilities.
- 2—Appropriation of funds for capital expansions and developments as follows:
 - (a) Huntington Beach Memorial State Park area, Georgetown County, bathhouses, picnic areas, water and sewer systems and miscellaneous developments in both white and Negro areas of this new seashore area—\$100,000.
 - (b) Continuing the development of the large Croft State Park area of Spartanburg County—\$80,000.
 - (c) Beginning of development of State Park areas on Hartwell Reservoir in Anderson County—\$100,000.

Detailed budgets will be filed with Budget and Control Board.

- 3—That funds be made available to inaugurate a program of interpretation at both state parks and historical memorials to the end that visitors can more fully understand and appreciate the natural and historical features of the areas.

SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps †	Museum	Trailer & Tent Camping ‡
AIKEN Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x			x
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x	
BARNWELL Blackville, S. C.	x	x	x	x	x	x	x				x		x		x			x
CHERAW Cheraw, S. C. { White Area. Negro Area.	x x	x x	x	x x	x x	x x	x x	x			x		x x	x	x x	x		x x
CHESTER Chester, S. C.	x	x				x	x				x				x			x
COLLETON WAYSIDE PARK Canadys, S. C.	x	x				x	x											x
CROFT Spartanburg, S. C., RFD.....	x	x	x	x	x								x		x			
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																		
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x			
GREENWOOD Ninety Six, S. C., RFD. { White Area. Negro Area.	x x	x x	x	x x	x x	x x	x x						x		x			
HUNTING ISLAND Frogmore, S. C. { White Area. Negro Area.	x x	x x		x x	x x		x x	x x				x	x		x			x
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x		x
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x			
LITTLE PEE DEE Dillon, S. C.	x	x	x	x	x	x	x											
MYRTLE BEACH Myrtle Beach, S. C.	x	x		x	x		x	x		x	x		x		x			x
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x		x			x
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x		
PLEASANT RIDGE (For Negroes) Cleveland, S. C.	x	x		x	x	x	x	x					x					
POINSETT Wedgfield, S. C. { White Area. Negro Area.	x x	x x	x	x x	x x	x x	x x	x				x	x		x	x		x
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x		x	
SANTEE Elloree, S. C., RFD.....	x	x		x	x	x	x	x					x		x			x
SESQUI-CENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x			
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x			x

* Where no regular barbecue pit and shelter are established, temporary arrangements can be made at all Parks.

† Two camps each at Cheraw, Kings Mountain and Poinsett.

‡ Where no developed camping areas are established, temporary arrangements can be made at all parks.

S. C. STATE COMMISSION OF FORESTRY—DIVISION OF STATE PARKS
SUMMARY OF STATE PARK USE—JULY 1, 1959—JUNE 30, 1960

NAME OF PARK	Cabin Days Occupied	Cabin Oc- cupants	Group Camps	Tents and Trailers	Fishermen	Picnickers	Swimmers	Out-of- State Cars	Total Cars	Total Visitors
Aiken	84	463	.....	1,033	2,393	22,215	5,888	419	6,957	30,105
Andrew Jackson .....	....	....	.....	.....	.....	7,016	.....	1,494	5,850	17,912
Barnwell .....	....	....	.....	1,038	1,291	52,393	6,343	613	18,233	81,369
Cheraw	500	3,804	16,117	5,904	10,700	88,817	70,570	11,426	36,836	203,560
Campbell's Lake (N) .....	....	....	.....	.....	917	6,571	3,481	819	2,691	13,372
Chester .....	....	....	.....	123	1,143	17,108	.....	1,193	10,542	42,160
Croft .....	....	....	.....	1,657	.....	20,272	30,226	263	19,992	77,308
Edisto .....	....	....	.....	.....	.....	.....	.....	.....	.....	.....
Givhans Ferry	216	1,268	.....	988	.....	19,211	7,052	486	8,694	32,382
Greenwood .....	....	....	.....	2,685	11,670	51,840	7,635	630	35,660	142,540
Greenwood (N) .....	....	....	.....	17	1,560	8,050	.....	85	5,795	24,000
Hunting Island	569	3,092	.....	5,764	34,676	67,402	76,565	10,332	63,751	253,362
Hunting Island (N)	22	126	.....	.....	1,578	23,433	13,432	2,413	12,480	49,602
Kings Mountain .....	....	....	16,857	6,241	879	65,795	10,880	26,980	41,145	187,010
Lee	35	175	.....	1,142	5,310	21,680	6,942	256	21,870	87,400
Little Pee Dee .....	....	....	.....	2,609	6,140	22,330	7,378	1,506	14,754	47,017
Myrtle Beach	681	4,040	.....	80,272	7,208	65,698	65,405	49,179	146,288	673,737
Oconee	1,651	9,969	.....	2,620	707	41,742	39,373	1,207	23,218	104,196
Paris Mountain .....	....	....	4,005	1,058	1,627	99,420	17,873	1,150	50,911	204,482
Pleasant Ridge (N)	33	162	.....	56	550	12,349	1,065	240	5,499	24,086
Poinsett	278	1,863	4,786	2,890	646	54,490	19,269	3,264	25,885	97,380
Mill Creek (N) .....	....	....	2,728	.....	279	9,626	10,445	105	4,080	19,554
Rivers Bridge .....	....	....	.....	300	416	19,847	11,271	291	10,774	39,773
Santee	215	1,080	.....	2,701	10,502	24,086	12,174	1,685	15,976	67,326
Sesqui-Centennial .....	....	....	.....	1,381	2,863	219,570	59,478	15,779	96,465	393,176
Table Rock	1,312	8,586	.....	5,650	3,595	173,729	41,385	5,317	58,952	238,276
Colleton .....	....	....	.....	177	.....	17,646	268	3,636	9,287	30,104
TOTALS	5,596	34,628	44,493	126,306	106,150	1,232,336	524,398	140,768	752,585	3,181,189

(N)—Negro

ADMINISTRATION

SUMMARY

No state-appropriated funds were provided for salary or wage adjustments and as a result losses of both technical and other personnel continued at an excessive rate. A total of 48 employees resigned during the year of which 83% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and Park program \$2,689,657.24. Of this total the Division of Forestry expended \$2,175,468.88 and the Division of State Parks \$514,188.36 (see Appendix for detailed explanation of funds available and expenditures made). State appropriated funds amounted to \$1,672,920 for the Division of Forestry and \$347,820 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 61 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 7 accidents. Of the 7 accidents which occurred, only 2 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and the assistance of the National Safety Council.

The Commission instituted a safe driving program sponsored by the National Safety Council several years ago. Under this program a driver must operate a vehicle on official business for twelve consecutive months without a preventable accident before entitled to the first year safe driving award. If a preventable accident occurs during the first three years or before the third

year award has been received, the driver's safe driving record is cancelled and he is required to begin again. Should a preventable accident occur after the third year award is received, the driver is penalized and is requested to operate for twelve additional months from date of accident before entitled to the next year award.

A review of the Commission's employees' safe driving records indicates that 149 of the 387 drivers have operated Commission or privately owned vehicles on official business for a period of one to five years without an accident; 83 for six to ten years; 103 for eleven to fifteen years; 52 for sixteen years and over.

COMMISSION PURCHASING

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and simplifying fiscal procedure. A total of 1,522 requisitions were received and 1,267 purchase orders were issued during the year.

Visual inventories were made during the year of all equipment in use by the Commission. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,779,375. In addition, the Commission has real property and improvements now estimated to be worth \$13,212,212.

PERSONNEL

A large number of Commission employees continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Thirteen per cent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

PERSONNEL LOSSES
Division of Forestry
Resignations—1959-1960

Foresters	6
Nurserymen	1
Asst. Nurseryman	1
	—
Technical	8
Clerk-Stenographers	5
Foreman	1
Foreman-Mechanic	1
Rangers	1
Wardens	6
Towermen	12
Tractor Operators	14
	—
Non-technical	40
	—
Total Resignations	48

Losses Due to Promotions or Change in Positions

Foresters	5
Asst. Nurseryman	1
Foreman-Mechanic	1
Foremen	2
Towermen	2
Tractor Operators	4
	—
	15
	—
Total Losses, Division of Forestry	63

**Division of State Parks
Resignations—1959-1960**

Asst. Maintenance Mechanic	1
Rangers	2
Park Assistant, Fishing Pier	1
Laborers	3
Foremen	3
Carpenter	1
Caretaker	1
	—
Total	12

Losses Due to Promotions or Change in Positions

Asst. Maintenance Mechanic	1
Foreman	1
	—
Total	2
	—
Total Losses, Division of State Parks	14
	—
Grand Total—Personnel Losses	77

APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1959-June 30, 1960

RECEIPTS

Division of Forestry:

Balance from 1958-59—Radio Comm. Fund	\$ 329.65
Balance from 1958-59—Federal Fund	27,134.31
State Appropriation—Operating	1,672,920.00
Federal Funds—Protection C-M Law, Sec. 2	299,500.00
Federal Funds—Reforestation C-M Law, Sec. 4 & N-D	24,525.00
Federal Funds—Cooperative Farm Management	38,550.00
Federal Funds—Watershed Projects	21,275.07
Federal Funds—Agricultural Stabilization	22,258.06
Federal Funds—Conservation Program	43,687.19
Counties & Timber Firms	13,620.79
TVA Transportation Reimbursement	7,162.44
State Forests	120,537.17
(Includes \$29,123.71 S.O.E.P. + \$5,921.86 Melon Land)	
Nurseries	417,449.97
Marking and Tallying Timber	9,989.58
Miscellaneous	25.00
Radio Communications	511.80
<hr/>	
Total Receipts—Forestry	\$ 2,719,476.03
Less Receipts Deposited to Cr. State Revenue Account	514,783.65
<hr/>	
Total Receipts Available for Expenditure	2,204,692.38
Total Expenditures	2,175,468.88
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Balance—Division of Forestry	29,223.50*

Division of State Parks:

Balance from 1958-59 Forests & Parks—Beach Village	2,052.23
Balance from 1958-59 Forests & Parks—Santee Landing	1,430.38
Balance from 1958-59 Parks Improvements	15,091.96
Balance from 1958-59 Myrtle Beach Fishing Pier	2,494.32
Balance from 1958-59 Myrtle Beach Swimming Pool	1,255.89
State Appropriation—Operating	347,820.00

State Appropriation—Historical Areas	6,051.00	
Forests & Parks Fund—Hunting Island Deposits	760.00	
Forests & Parks Fund—Timber Sales	209,268.33	
Forests & Parks Fund—Santee Boat Landing	2,318.73	
Myrtle Beach Fishing Pier	49,491.23	
(Includes Sinking Fund Loan of \$32,000).		
Myrtle Beach Swimming Pool	12,708.80	
Cabin Rentals	25,774.82	
Concession Stands	2,353.08	
Bathhouse & Swimming	51,594.26	
Boat Rentals	3,045.40	
Picnic Shelters, Recreation Bldgs., & Trailer Camps	20,299.48	
Group Camps	13,381.40	
Miscellaneous	5,166.14	
		<hr/>
Total Receipts—Parks		772,357.45
Less Receipts Deposited to Cr. State Revenue Account		121,614.58
		<hr/>
Total Park Receipts Available for Expenditure....		650,742.87
Total Park Expenditures		514,188.36
		<hr/>
Balance—Division of State Parks		136,554.51†

EXPENDITURES

Administrative & Technical	570,106.95	
State Forestry Nurseries	416,483.29	
State Forests Projects	64,181.05	
Fire Protection	1,124,697.59	
		<hr/>
Total Expenditures—Division of Forestry		2,175,468.88
Total Expenditures—Division of Parks		514,188.36
		<hr/>
GRAND TOTAL—Expenditures		2,689,657.24

RECAPITULATION

Funds Available:

Division of Forestry	2,204,692.38
Division of State Parks	650,742.87

 2,855,435.25

Expenditures:

Division of Forestry	2,175,468.88
Division of State Parks	514,188.36

 2,689,657.24

Balance	165,778.01*†
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* Forestry: Forestry Commission—

Specials	28,382.05
Radio Communications ..	841.45
† Parks : Forests & Parks Fund _	120,244.31
Parks Improvement ____	15,038.76
M. B. Fishing Pier ____	1,154.44
M. B. Swimming Pool___	117.00

 \$165,778.01

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1959-60

UNIT	Organized Personnel					Volunteer Personnel	Grand Total
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	110	115
Aiken	1	4	2	5	12	442	454
Allendale	1	2	1	3	7	23	30
Anderson	1	2	1	3	7	119	126
Bamberg	1	2	1	2	6	73	79
Barnwell	1	2	2	2	7	152	159
Beaufort	1	3	2	4	10	66	76
Berkeley	1	4	2	4	11	391	402
Calhoun	1	2	1	2	6	16	22
Charleston	1	4	3	3	11	330	341
Cherokee	1	1	1	1	4	71	75
Chester	1	3	1	1	6	135	141
Chesterfield	1	3	1	4	9	100	109
Clarendon	1	3	2	3	9	101	110
Colleton	1	4	3	5	13	182	195
Darlington	1	2	..	3	6	338	344
Dillon	1	2	1	2	6	191	197
Dorchester	1	4	2	3	10	56	66
Edgefield	1	2	1	1	5	121	126
Fairfield	1	4	1	3	9	106	115
Florence	1	4	2	4	11	304	315
Georgetown	1	4	2	4	11	374	385
Greenville	1	3	1	4	9	518	527
Greenwood	1	2	1	2	6	142	148
Hampton	1	3	1	3	8	124	132
Horry	1	5	2	4	12	418	430
Jasper	1	3	2	2	8	252	260
Kershaw	1	3	2	6	12	235	247
Lancaster	1	3	1	2	7	99	106
Laurens	1	3	1	2	7	177	184
Lee	1	2	1	3	7	132	139
Lexington	1	3	2	5	11	346	357
McCormick	1	1	1	1	4	40	44
Marion	1	3	2	3	9	207	216
Marlboro	1	3	2	3	9	152	161
Newberry	1	2	1	2	6	79	85
Oconee	1	2	1	3	7	99	106
Orangeburg	1	5	3	5	14	272	286
Pickens	1	3	1	4	9	166	175
Richland	1	5	2	4	12	359	371
Saluda	1	2	1	1	5	57	62
Spartanburg	1	3	1	4	9	190	199
Sumter	1	3	2	3	9	408	417
Union	1	2	1	1	5	35	40
Williamsburg	1	5	2	4	12	596	608
York	1	2	1	4	8	154	162
TOTALS	46	134	68	138	386	9,058	9,444

TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1959 - JUNE 30, 1969

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July	84	2.9	381.5	4.5
August	45	1.5	86.7	1.9
September	14	0.5	20.5	1.5
October	1	0.1	0.6	0.6
November	101	3.4	299.0	3.0
December	193	6.5	958.1	5.0
January	267	9.0	1,831.4	6.9
February	257	8.7	2,748.8	10.7
March	773	26.1	8,680.1	11.2
April	755	25.5	11,081.5	14.7
May	281	9.5	1,463.2	5.2
June	187	6.3	2,234.4	11.9
TOTALS	2,958	100.0	29,785.8	10.1

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1959-60

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	..	...	2	10.7	1	2.4	5	21.5	8	33.9	8	27.2	..	...	..	...	24	95.7
Aiken	9	46.7	1	1.8	3	225.7	31	262.5	35	379.2	8	357.9	1	3.2	28	104.7	116	1,381.7
Allendale	..	...	..	...	..	...	7	104.2	5	36.5	3	16.0	..	...	1	8.0	16	164.7
Anderson	..	...	1	3.0	..	...	14	124.0	18	106.1	3	0.3	2	11.2	5	32.8	43	277.4
Bamberg	..	...	..	...	..	...	7	65.8	6	52.0	5	7.2	..	...	..	...	18	125.0
Barnwell	..	...	..	...	..	...	17	127.6	11	83.4	9	58.9	..	...	5	...	42	279.8
Beaufort	..	...	..	...	1	4.5	10	27.5	7	22.8	11	98.2	1	22.0	2	20.2	32	195.2
Berkeley	2	43.0	4	50.0	1	0.1	85	889.9	34	458.1	85	1,206.4	..	...	2	10.5	213	2,658.0
Calhoun	1	1.8	..	...	..	...	3	2.2	..	...	2	19.5	..	...	..	...	6	23.5
Charleston	..	...	2	3.6	13	136.8	90	312.1	20	122.9	22	161.3	..	...	10	42.5	157	779.2
Cherokee	..	...	1	6.0	..	...	8	40.2	5	23.2	..	...	..	...	..	...	14	69.4
Chester	..	...	8	39.6	..	...	3	6.9	13	79.3	3	6.6	1	47.0	4	12.4	32	191.8
Chesterfield	6	114.2	2	13.0	2	15.0	6	57.8	30	344.0	38	154.7	3	9.0	1	20.0	68	4,227.7
Clarendon	1	3.0	2	...	2	9.0	28	224.9	10	343.2	22	227.9	3	7.0	4	9.4	90	824.4
Colleton	..	...	1	...	1	1.0	26	98.5	31	248.8	21	331.6	2	11.0	1	21.7	82	712.6
Darlington	..	...	..	...	..	...	29	106.8	23	82.2	1	173.0	1	2.1	10	31.3	67	469.8
Dillon	..	...	3	74.4	1	0.8	16	83.3	28	140.4	4	2.4	..	...	3	3.6	55	232.9
Dorchester	..	...	3	2.4	5	67.5	10	248.0	21	187.0	5	23.0	..	...	4	33.0	45	558.5
Edgefield	1	0.1	2	2.2	..	...	7	6.9	8	24.1	2	68.6	1	6.6	3	14.7	24	123.2
Fairfield	..	...	5	20.2	2	7.5	9	16.5	8	29.7	..	...	1	5.0	4	8.3	29	87.2
Florence	1	0.6	4	35.3	1	3.2	24	93.6	55	739.1	53	679.7	2	3.0	13	29.3	153	1,583.8
Georgetown	3	6.4	10	94.9	3	29.3	49	421.1	26	99.5	22	161.0	4	14.2	3	41.6	120	868.0
Greenville	..	...	1	0.3	3	80.6	64	353.3	41	142.3	17	13.0	1	2.0	15	15.4	142	606.9
Greenwood	..	...	1	0.6	3	48.6	8	5.6	9	32.0	..	...	3	8.2	3	15.5	27	110.5
Hampton	..	...	..	...	1	4.0	30	201.4	8	273.2	..	...	1	1.5	5	12.2	45	492.3
Horry	4	143.7	..	...	2	1.9	28	157.9	47	775.5	52	445.9	2	1.4	15	121.0	150	1,647.3
Jasper	1	20.0	1	0.5	3	162.0	13	88.4	17	154.3	46	449.7	2	14.1	2	7.3	85	896.3
Kershaw	1	40.0	2	13.5	..	...	18	151.0	18	129.7	3	27.5	2	476.0	8	16.4	52	854.1
Lancaster	..	...	11	6.4	..	...	14	77.0	6	9.0	..	...	..	...	1	1.8	22	94.2
Laurens	..	...	..	...	..	...	14	20.3	13	62.8	..	...	..	...	3	4.5	41	361.4
Lee	1	0.5	..	...	..	...	15	332.9	14	57.5	8	56.7	..	...	1	3.0	39	450.6
Lexington	5	6.6	2	10.3	..	...	14	154.3	28	40.5	2	1.2	4	9.1	8	132.5	63	354.5
Marion	..	...	4	6.6	..	...	14	46.8	15	314.7	..	...	..	...	4	10.6	37	378.7
Marlboro	..	...	3	7.2	1	0.5	15	39.0	37	271.1	..	...	1	11.0	12	45.2	69	374.0

McCormick	1	2.3	1	0.9	..	....	7	14.9	3	1.8	..	....	..	1	....	1	1.8	13	21.7
Newberry	1	3.0	..	..	..	....	4	28.0	4	47.2	..	....	..	3	0.4	3	15.8	13	94.4
Oconee	..	..	11	98.4	..	....	2	1.0	18	32.2	2	2.2	..	3	..	3	2.3	36	136.1
Orangeburg	..	..	..	..	1	2.0	45	354.5	39	388.5	51	463.8	2	..	6.0	2	40.6	140	1,255.4
Pickens	..	..	9	19.2	..	....	5	5.2	10	14.7	5	19.5	1	13	5.0	1	20.8	43	84.4
Richland	3	1.2	14	45.4	..	....	33	158.0	36	364.5	18	258.8	2	8	14.5	2	156.7	114	999.1
Saluda	1	0.2	..	..	..	....	5	15.8	7	19.3	..	....	..	5	..	5	6.6	18	41.9
Spartanburg	..	..	2	6.0	..	....	9	34.5	15	168.5	..	....	..	8	..	8	29.1	34	238.1
Sumter	..	..	..	..	2	12.6	55	497.7	35	179.0	9	68.7	2	5	7.2	5	21.7	108	786.9
Union	..	..	6	49.5	..	....	6	13.5	4	15.5	4	3.5	..	3	..	3	3.5	23	85.5
Williamsburg	..	..	1	4.0	11	229.4	31	398.8	80	1,358.8	43	1,353.8	1	1	1.5	1	2.1	168	3,348.4
York	..	..	1	4.4	1	2.0	18	43.1	5	26.3	..	....	..	5	..	5	67.8	30	143.6
TOTALS	42	433.3	119	904.1	64	1,046.4	951	6,534.7	911	12,014.3	587	6,945.7	47	237	699.2	1,208.1	2,958	29,785.8	

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1959-60

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL NO.
Abbeville	1	21	2	....	....	24
Aiken	12	80	22	2	....	116
Allendale .....	....	13	2	1	....	16
Anderson	3	36	4	....	....	43
Bamberg	1	14	3	....	....	18
Barnwell	3	27	12	....	....	42
Beaufort	2	24	6	....	....	32
Berkeley	8	149	52	4	....	213
Calhoun	1	4	1	....	....	6
Charleston	15	126	16	....	....	157
Cherokee .....	....	13	1	....	....	14
Chester	3	24	5	....	....	32
Chesterfield	17	41	9	....	1	68
Clarendon	13	64	11	2	....	90
Colleton	8	61	12	1	....	82
Darlington	6	57	3	1	....	67
Dillon	13	36	6	....	....	55
Dorchester .....	....	31	13	1	....	45
Edgefield	1	21	2	....	....	24
Fairfield .....	....	27	2	....	....	29
Florence	14	118	17	4	....	153
Georgetown	12	87	21	....	....	120
Greenville	41	92	8	1	....	142
Greenwood	1	23	3	....	....	27
Hampton .....	....	37	8	....	....	45
Horry	29	91	28	2	....	150
Jasper	7	55	23	....	....	85
Kershaw	2	38	11	1	....	52
Lancaster	4	15	3	....	....	22
Laurens	6	30	4	1	....	41
Lee .....	....	34	4	1	....	39
Lexington	18	41	3	1	....	63
Marion	5	30	1	1	....	37
Marlboro	11	51	7	....	....	69
McCormick	4	9	....	....	....	13
Newberry	2	8	3	....	....	13
Oconee	4	31	1	....	....	36
Orangeburg	2	101	37	....	....	140
Pickens	4	38	1	....	....	43
Richland	12	79	21	2	....	114
Saluda	3	15	....	....	....	18
Spartanburg .....	....	30	4	....	....	34
Sumter	6	78	24	....	....	108
Union .....	....	21	2	....	....	23
Williamsburg	31	85	45	6	1	168
York	3	25	2	....	....	30
TOTALS	328	2,131	465	32	2	2,958

UNIT	July 1959		Aug. 1959		Sept. 1959		Oct. 1959		Nov. 1959		Dec. 1959		Jan. 1960		Feb. 1960		Mar. 1960		April 1960		May 1960		June 1960	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	1	8.0	..	17.5	..	1.0	..	0.6	..	4	14.9	..	8	..	9	10.3	7	35.2	6	25.8	2	3.0	4	13.4
Aiken	7	45.1	9	17.5	4	1.0	1	0.6	..	4	14.9	1	1	2	20.9	11	176.5	25	777.8	16	154.2	17	68.7	
Allendale .....	..	..	3	7.6	..	..	..	..	..	..	..	5	3	2	7.0	3	89.0	5	29.2	4	17.5	..	..
Anderson .....	..	..	..	..	..	..	..	..	..	..	..	3	1	1	3.2	1	8.0	15	133.6	8	98.8	5	10.6	
Bamberg .....	..	..	..	..	..	..	..	..	..	..	..	3	..	2	4.5	..	..	6	10.4	5	80.0	1	2.1	
Barnwell .....	..	..	..	..	..	..	..	..	..	2	3.3	3	3	3	23.2	9	43.8	16	127.3	5	46.8	1	0.7	
Beaufort .....	..	..	..	..	..	..	..	..	..	1	0.5	1	1	5	39.0	1	20.0	10	67.4	6	21.4	8	43.9	
Berkeley	4	14.0	..	..	2	7.0	..	..	1	30.0	13	112.8	32	371.8	27	527.3	61	489.4	58	954.5	14	150.7	1	0.5
Calhoun	2	1.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	19.8	..	..	..	..	1	1.8
Charleston	5	20.7	..	..	1	3.0	..	..	..	..	12	22.3	29	85.2	22	148.9	25	134.5	36	178.7	20	140.4	7	45.5
Cherokee	3	17.2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	10.7	7	35.5	1	6.0	..	..
Chester	2	28.6	2	2.7	..	..	..	..	2	0.9	5	9.3	2	7.2	2	2.4	7	28.9	5	37.7	4	69.9	1	4.2
Chesterfield	2	14.7	1	3.0	..	..	..	..	2	18.0	3	22.0	9	8.5	..	..	17	87.2	17	397.3	3	31.0	14	69.9
Clarendon	2	8.0	..	..	..	..	..	..	..	..	..	5	4	4	13.0	9	24.3	32	250.4	31	478.0	10	45.7	
Colleton .....	..	..	..	..	..	..	..	..	..	..	..	2	..	2	96.0	2	165.3	24	297.4	31	125.4	10	15.0	
Darlington	2	4.2	3	5.7	..	..	..	..	4	9.4	7	10.9	8	13.1	3	8.0	17	163.0	16	241.1	6	10.3	4	5.4
Dillon .....	..	..	1	1.6	..	..	..	..	2	1.0	8	8.6	1	0.9	3	16.5	7	88.2	16	89.8	8	5.9	9	20.4
Dorchester .....	..	..	..	..	..	..	..	..	..	..	..	2	3.0	2	22.0	6	40.0	10	114.5	14	337.0	8	42.0	
Edgefield	2	4.1	..	..	..	..	..	..	..	..	..	..	..	2	1.4	2	1.9	6	34.4	6	12.8	2	0.8	
Fairfield	2	16.8	1	2.1	..	..	..	..	2	3.8	2	1.2	2	10.4	3	18.5	5	8.9	3	3.0	2	5.3	7	17.2
Florence	1	0.8	1	11.0	1	1.8	..	..	5	10.3	17	353.2	11	25.3	12	190.2	42	433.8	43	268.0	10	21.4	10	268.0
Georgetown	3	6.4	..	..	..	..	..	..	1	6.0	5	26.3	16	206.0	12	37.7	24	196.6	43	298.1	13	70.4	3	20.5
Greenville	1	1.5	3	4.4	..	..	..	..	13	22.4	9	16.7	6	2.2	7	10.0	28	281.2	64	260.4	10	7.5	1	0.6
Greenwood	1	0.5	2	1.8	..	..	..	..	1	0.4	3	..	3	12.2	1	0.3	7	71.5	6	10.5	3	2.7	3	10.6
Hampton .....	..	..	..	..	..	..	..	..	3	10.5	3	7.0	12	76.8	3	11.0	15	104.8	5	190.2	1	14.0	3	78.0
Horry	1	0.1	1	0.7	..	..	..	..	10	10.3	14	56.5	8	86.9	18	277.9	28	264.0	40	743.5	12	27.7	18	179.7
Jasper	2	14.0	1	1.7	1	0.1	..	..	4	13.6	..	..	14	73.2	8	180.0	30	420.3	12	109.3	13	84.1	..	..
Kershaw .....	..	..	1	1.5	..	..	..	..	2	13.0	1	6.0	4	33.2	1	1.0	18	614.2	10	105.5	10	59.4	5	20.3
Lancaster	3	9.9	..	..	..	..	..	..	..	..	..	..	..	2	2.6	2	2.6	6	58.3	6	17.0	2	0.2	
Laurens .....	..	..	3	5.4	..	..	..	..	2	4.5	2	4.3	2	8.0	2	2.6	13	247.6	5	44.2	5	7.7	3	6.2
Lee .....	..	..	..	..	..	..	..	..	1	1.7	4	11.9	2	10.6	6	279.0	17	109.3	6	18.4	..	..	3	37.9
Lexington	6	13.5	1	0.5	1	0.3	..	..	2	1.1	3	0.9	6	1.6	7	11.4	15	292.4	10	14.2	7	11.2	5	19.7
Marion	1	3.0	..	..	..	..	..	..	1	3.0	4	14.3	3	7.4	1	0.4	8	20.3	9	273.6	7	24.4	3	32.3
Marlboro	1	0.8	..	..	1	0.1	..	..	3	15.5	9	14.6	7	23.5	11	33.2	11	106.7	18	169.0	4	5.0	4	5.6
McCormick .....	..	..	3	2.6	..	..	..	..	..	..	1	1.3	2	4.4	1	0.2	3	7.5	1	5.2	1	0.3	1	0.2
Newberry	1	11.6	2	7.2	..	..	..	..	..	..	..	..	..	16.4	..	..	3	49.6	2	2.0	1	3.2	2	4.4
Oconee .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	49.6	2	2.0	1	3.2	2	4.4
Orangeburg	3	10.7	2	3.4	1	3.5	..	..	3	5.8	2	48.1	2	1.1	3	3.2	12	17.1	10	103.0	6	9.8	1	0.4
Pickens .....	..	..	1	0.8	1	0.3	..	..	6	14.8	6	2.8	12	93.5	16	130.9	42	459.4	26	229.4	14	87.1	15	183.6
Richland	10	22.3	2	2.3	1	0.5	..	..	3	13.4	7	32.7	3	5.2	..	..	16	33.0	13	25.3	2	3.9	2	3.5
Saluda	1	2.8	..	..	2	2.9	..	..	1	2.7	..	..	..	..	7	47.1	31	487.0	27	152.6	11	57.1	12	178.9
Spartanburg	3	12.0	..	..	..	..	..	..	..	..	..	..	..	..	1	0.5	3	8.4	4	7.2	2	9.0	4	8.4
Sumter	1	5.0	..	..	..	..	..	..	12	41.6	8	5.0	1	2.0	1	2.0	7	119.6	19	90.5	1	1.0	1	6.0
Union	1	0.5	..	..	..	..	..	..	..	..	..	..	..	78.9	6	55.9	31	344.5	23	186.4	7	22.3	8	31.5
Williamsburg	7	73.8	1	3.0	..	..	..	..	..	..	1	1.0	2	6.0	2	1.5	2	2.0	14	74.0	1	0.5	..	..
York	3	9.0	1	0.2	..	..	..	..	2	6.4	12	75.4	4	323.0	19	168.2	52	934.2	43	752.6	15	281.2	5	730.6
TOTALS ..	84	381.5	45	86.7	14	20.5	1	0.6	101	299.0	193	958.1	267	1,831.4	257	2,748.8	773	8,680.1	755	11,081.5	281	1,463.2	187	2,234.4

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1959-60

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	42	1.4	433.3	10.3
Railroads	119	4.0	904.1	7.6
Campers	64	2.2	1,046.4	16.4
Smokers	951	32.2	6,534.7	6.9
Debris Burning	911	30.8	12,014.3	13.2
Incendiary	587	19.8	6,945.7	11.8
Lumbering	47	1.6	699.2	14.9
Miscellaneous	237	8.0	1,208.1	5.1
TOTALS	2,958	100.0	29,785.8	10.1

TABLE 7—CAUSES OF FIRES—FIVE YEAR PERIOD
(Per Cent of Total)

CAUSES	1955-56	1956-57	1957-58	1958-59	1959-60	Average For 5-Year Period
Lightning	1.1	1.7	1.1	0.4	1.4	1.1
Railroads	1.6	2.3	2.6	3.3	4.0	2.7
Campers	2.6	2.7	3.1	2.7	2.2	2.7
Smokers	23.8	26.0	27.0	33.0	32.2	28.3
Debris Burning	22.1	21.9	20.1	29.8	30.8	25.1
Incendiary	39.4	35.3	34.7	19.2	19.8	29.7
Lumbering	2.5	2.4	2.1	2.0	1.6	2.1
Miscellaneous	6.9	7.7	9.3	9.6	8.0	8.3

TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—FISCAL YEAR 1959-60

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
Abbeville	167,647	24	95.7	.06	4.0
Aiken	401,376	116	1,381.7	.34	11.9
Allendale	131,400	16	164.7	.13	10.3
Anderson	173,700	43	277.4	.16	6.5
Bamberg	126,000	18	125.0	.10	6.9
Barnwell	74,565	42	279.8	.38	6.7
Beaufort	165,000	32	195.2	.12	6.1
Berkeley	399,091	213	2,658.0	.67	12.5
Calhoun	123,500	6	23.5	.02	3.9
Charleston	271,114	157	779.2	.29	5.0
Cherokee	127,800	14	69.4	.05	5.0
Chester	260,023	32	191.8	.07	6.0
Chesterfield	310,000	68	4,227.7	1.36	62.2
Clarendon	228,500	90	824.4	.36	9.2
Colleton	465,000	82	712.6	.15	8.7
Darlington	208,500	67	469.8	.23	7.0
Dillon	144,100	55	232.9	.16	4.2
Dorchester	268,200	45	558.5	.21	12.4
Edgefield	172,363	24	123.2	.07	5.1
Fairfield	338,957	29	87.2	.03	3.0
Florence	293,900	153	1,583.8	.54	10.4
Georgetown	415,600	120	868.0	.21	7.2
Greenville	267,800	142	606.9	.23	4.3
Greenwood	198,963	27	110.5	.06	4.1
Hampton	239,500	45	492.3	.21	10.9
Horry	557,600	150	1,647.3	.30	11.0
Jasper	303,400	85	896.3	.30	10.5
Kershaw	336,500	52	854.1	.25	16.4
Lancaster	199,400	22	94.2	.05	4.3
Laurens	244,621	41	361.4	.15	8.8
Lee	110,600	39	450.6	.41	11.6
Lexington	291,500	63	354.5	.12	5.6
Marion	144,859	37	378.7	.26	10.2
Marlboro	224,700	69	374.0	.17	5.4
McCormick	150,600	13	21.7	.01	1.7
Newberry	204,949	13	94.4	.05	7.3
Oconee	257,652	36	136.1	.05	3.8
Orangeburg	318,800	140	1,255.4	.39	9.0
Pickens	190,100	43	84.4	.04	2.0
Richland	289,500	114	999.1	.35	8.8
Saluda	149,946	18	41.9	.03	2.3
Spartanburg	208,300	34	238.1	.11	7.0
Sumter	205,400	108	786.9	.38	7.3
Union	157,894	23	85.5	.05	3.7
Williamsburg	429,800	168	3,348.4	.78	19.9
York	226,300	30	143.6	.06	4.8
TOTALS	11,175,000	2,958	29,785.8	.27	10.1

TABLE 3—FIVE YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1955-56	11,300,008	4,506	76,743.5	0.68	17.0
1956-57	11,300,008	3,883	46,777.8	0.41	12.0
1957-58	11,300,008	2,590	20,253.0	0.18	7.8
1958-59	11,175,000	4,608	39,612.3	0.35	8.6
1959-60	11,175,000	2,958	29,785.8	0.27	10.1
Five-Year Average	11,250,005	3,709	42,634.5	0.38	11.5

TABLE 10—S. C. STATE COMMISSION OF FORESTRY 1959-60 SEEDLING DISTRIBUTION
BY LAND CLASSIFICATION

Land Ownership	Trees Planted
Farmer	136,109,765
Other Individuals	14,316,400
Associations and Clubs	715,000
Lumber Company	1,914,500
Pulp and Paper Company	5,815,000
Other Industry	3,594,000
Schools	204,000
State Forests	1,169,000
Other State Lands	439,700
Cities, Towns, Counties	269,000
Federal Government	700,000
TOTAL	165,246,365

In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

Continental Can Company	2,938,000
West Virginia Pulp and Paper Company	6,658,200
Catawba Timber Company, Inc.	1,823,306
International Paper Company	1,002,200
Atomic Energy Commission	9,798,347
Williams Furniture Company	50,000

Totals	22,270,053
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Grand Totals, trees planted in S. C. 1959-60	187,516,418
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The above figures include 18,100,000 loblolly pine seedlings which were custom grown for South Carolina by TVA nurseries.

In addition to the above tree planting, a total of 1,081 acres were direct seeded to pine during the fiscal year.

TABLE 11—S. C. STATE COMMISSION OF FORESTRY 1959-60 SEEDLING DISTRIBUTION
BY COUNTY AND SPECIES

COUNTY AND DISTRICT	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red Cedar	Arizona Cypress	Misc. Species	Total	Soil Bank	Other
Chesterfield	944,300	7,428,400	115,000	....	....	5,000	12,000	8,504,700	5,509,700	2,995,000
Kershaw	1,703,400	8,563,600	47,000	....	....	....	7,000	10,321,000	5,645,200	4,675,800
Lancaster	4,260,450	245,000	....	....	....	....	6,000	4,511,450	3,205,150	1,306,300
Lee	351,000	1,787,300	....	6,000	....	5,000	....	2,149,300	1,339,500	809,800
Richland	2,223,000	1,841,500	23,500	4,500	....	2,000	....	4,094,500	2,705,000	1,389,500
Sumter	687,600	2,858,000	16,200	500	....	1,000	5,000	3,568,300	2,129,000	1,439,300
TOTAL—Camden District	10,169,750	22,723,800	201,700	11,000	....	13,000	30,000	33,149,250	20,533,550	12,615,700
Darlington	219,000	1,864,200	36,000	....	....	....	....	2,119,200	1,661,700	457,500
Dillon	495,750	713,750	25,500	1,500	....	2,500	2,000	1,241,000	248,000	993,000
Florence	96,000	503,000	6,000	....	....	....	....	605,000	299,500	305,500
Horry	244,000	146,500	....	....	....	....	155,000	545,500	129,000	416,500
Marion	229,000	634,500	7,500	....	....	1,000	500	872,500	129,500	743,000
Marlboro	669,000	2,827,800	6,300	....	....	....	4,000	3,507,100	2,482,300	1,024,800
TOTAL—Florence District	1,952,750	6,689,750	81,300	1,500	....	3,500	161,500	8,890,300	4,950,000	3,940,300
Berkeley	1,100,200	701,200	....	....	....	1,600	700	1,803,700	432,000	1,371,700
Clarendon	386,900	1,432,700	35,500	6,000	....	....	....	1,861,100	1,278,200	582,900
Georgetown	131,500	226,500	....	....	....	....	....	358,000	94,500	263,500
Williamsburg	836,300	361,000	....	....	....	....	5,000	1,202,300	891,500	310,800
TOTAL—Kingstree District	2,454,900	2,721,400	35,500	6,000	....	1,600	5,700	5,225,100	2,696,200	2,528,900
Abbeville	3,216,250	....	6,250	2,250	....	3,000	500	3,228,250	1,455,500	1,772,750
Chester	2,665,300	500	500	500	....	2,500	5,000	2,674,300	1,359,300	1,315,000
Edgefield	2,790,500	195,000	....	....	....	9,000	....	2,994,500	1,585,500	1,409,000
Fairfield	3,088,100	....	500	500	....	....	3,000	3,092,100	1,725,600	1,366,500
Greenwood	2,396,000	2,500	1,200	3,000	....	1,000	1,000	2,404,700	1,388,500	1,016,200
Laurens	8,665,800	....	2,500	8,500	....	500	36,500	8,713,800	6,490,200	2,293,600
McCormick	2,134,000	65,000	....	....	....	....	....	2,199,000	1,137,500	1,061,500
Newberry	3,255,900	100,000	1,000	300	....	....	....	3,357,200	1,962,500	1,394,700
Saluda	1,876,600	303,000	....	....	....	....	....	2,179,600	1,861,600	318,000
TOTAL—Newberry District	30,088,450	666,000	11,950	15,050	....	16,000	46,000	30,843,450	18,896,200	11,947,250

Aiken	274,900	7,732,300	14,500	1,000	....	4,500	....	8,027,200	2,947,800	5,079,400
Allendale	22,000	4,574,200	....	....	....	8,000	....	4,604,200	3,554,200	1,050,000
Bamberg	98,000	5,165,400	....	....	....	....	....	5,258,400	4,680,900	577,500
Barnwell	40,000	8,614,200	25,000	....	....	2,500	....	8,681,700	7,118,200	1,563,500
Calhoun	182,000	1,913,600	10,000	....	....	2,000	....	2,107,600	1,327,100	780,500
Lexington	861,700	3,700,000	17,500	....	....	1,000	....	4,581,200	1,977,000	2,604,200
Orangeburg	700,500	7,190,700	56,000	1,000	....	4,500	....	7,961,700	5,660,300	2,301,400
TOTAL—Orangeburg District	2,174,100	38,890,400	123,000	2,000	....	22,500	....	41,222,000	27,265,500	13,956,500
Anderson	7,116,200	26,000	9,000	33,000	....	10,500	....	7,216,200	5,149,500	2,066,700
Cherokee	1,780,100	7,000	14,500	9,500	....	....	....	1,840,100	1,292,828	547,272
Greenville	4,074,600	1,750	4,250	118,750	....	11,500	....	4,220,850	3,426,100	794,750
Oconee	1,913,900	4,000	500	48,650	....	3,200	....	2,069,750	749,200	1,320,550
Pickens	2,639,900	2,000	1,000	68,450	2,000	4,675	....	2,768,625	1,551,600	1,217,025
Spartanburg	7,460,500	6,500	4,600	12,000	....	3,500	....	7,488,600	6,149,600	1,339,000
Union	2,204,800	....	2,000	....	....	....	....	2,209,800	1,366,500	843,300
York	5,685,820	57,600	500	2,500	....	....	....	5,747,420	4,521,520	1,225,900
TOTAL—Spartanburg District	32,885,820	104,850	36,350	292,850	2,000	33,375	....	33,561,345	24,206,848	9,354,497
Beaufort	37,000	506,000	....	....	....	2,000	....	545,000	340,000	205,000
Charleston	228,500	172,500	....	....	....	2,000	....	403,000	240,500	162,500
Colleton	868,500	3,916,500	17,000	....	....	12,000	....	4,817,000	3,224,500	1,592,500
Dorchester	268,000	849,500	3,000	....	....	....	....	1,120,500	641,500	479,000
Hampton	20,000	3,602,600	7,000	....	....	1,500	....	3,631,100	1,805,100	1,826,000
Jasper	545,320	1,284,000	7,000	....	....	2,000	....	1,838,320	453,820	1,384,500
TOTAL—Walterboro District	1,967,320	10,331,100	34,000	....	....	19,500	....	12,354,920	6,705,420	5,649,500
STATE TOTAL	81,693,090	82,127,300	523,800	328,400	2,000	109,475	*462,300	165,246,365	105,253,718	59,992,647

* Yellow Poplar124,000
 Shortleaf182,500
 Bald Cypress155,700
 Table Mountain Pine 100

TABLE 12—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

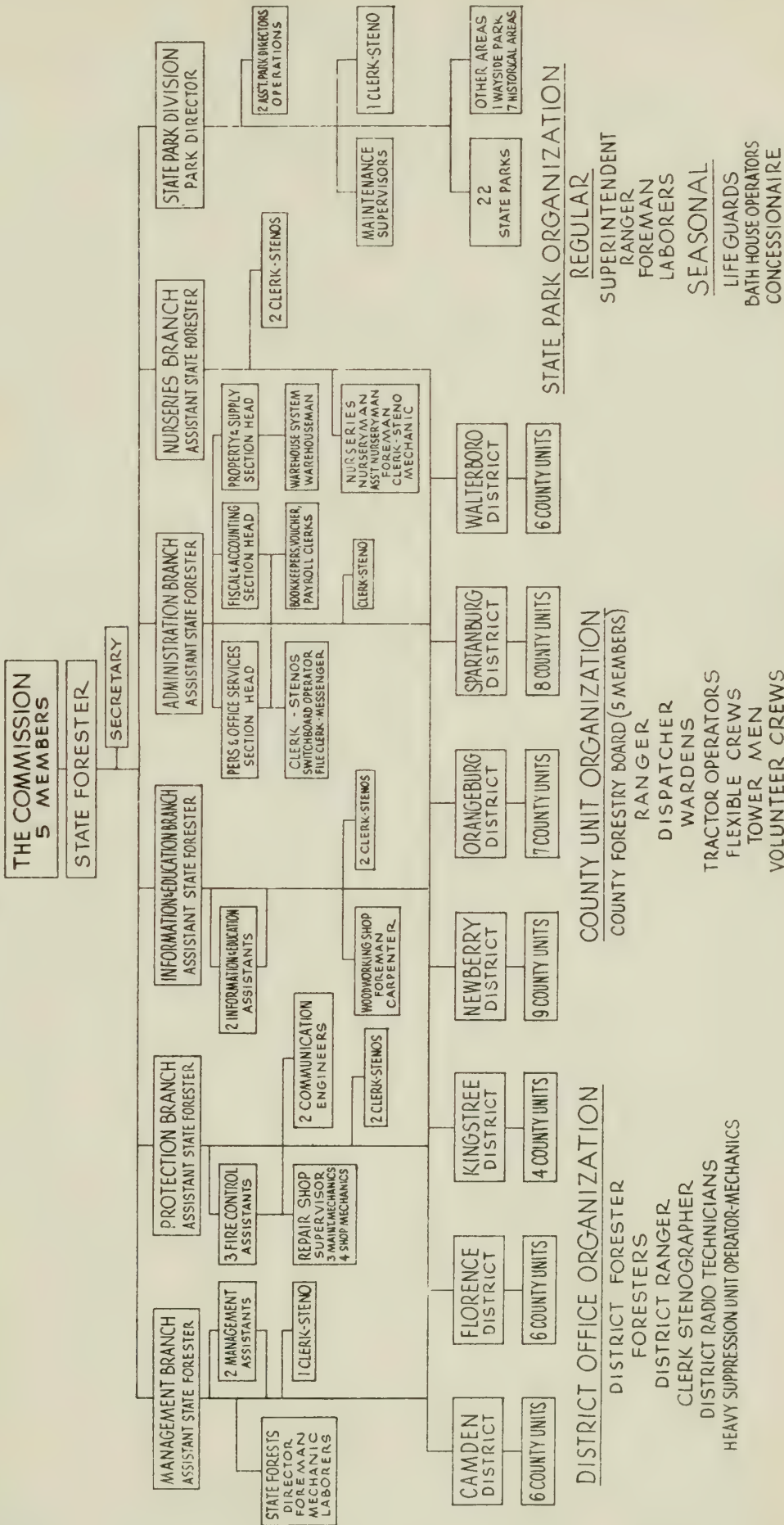
County	Seedlings Planted 1929-1959	Seedlings Planted 1959-1960	Grand Total Planted To Date	Acres Planted Through June 30, 1960	Acres Needing Planting as of June 30, 1960
Abbeville	12,893,788	3,590,150	16,483,938	16,484	60,446
Aiken	89,393,200	11,120,169	100,513,369	100,513	124,903
Allendale	26,314,895	5,193,200	31,508,095	31,508	34,781
Anderson	16,513,447	7,216,200	23,729,647	23,730	53,153
Bamberg	12,560,950	5,566,400	18,127,350	18,127	13,805
Barnwell	43,024,902	17,638,078	60,662,980	60,663	32,714
Beaufort	4,809,845	560,000	5,369,845	5,370	57,187
Berkeley	22,288,635	2,378,700	24,667,335	24,667	63,669
Calhoun	8,255,350	2,273,600	10,528,950	10,529	37,948
Charleston	4,152,440	422,000	4,574,440	4,574	34,464
Cherokee	6,933,629	2,164,912	9,098,541	9,099	29,315
Chester	14,410,800	2,879,600	17,290,400	17,290	36,703
Chesterfield	28,050,850	9,034,700	37,085,550	37,086	59,261
Clarendon	13,294,915	1,940,100	15,235,015	15,235	40,439
Colleton	22,221,880	5,338,000	27,559,880	27,560	87,864
Darlington	6,969,320	2,119,200	9,088,520	9,089	33,303
Dillon	4,108,455	1,241,000	5,349,455	5,349	18,237
Dorchester	18,398,180	1,573,500	19,971,680	19,972	45,243
Edgefield	9,076,038	3,018,500	12,094,538	12,095	20,498
Fairfield	11,397,679	3,280,100	14,677,779	14,678	21,765
Florence	4,383,268	605,000	4,988,268	4,988	11,933
Georgetown	13,230,700	1,346,600	14,577,300	14,577	41,683
Greenville	7,725,129	4,234,850	11,959,979	11,960	74,011
Greenwood	12,719,622	2,548,000	15,267,622	15,268	30,530
Hampton	23,458,365	3,879,100	27,337,465	27,337	59,303
Horry	13,999,900	1,049,500	15,049,400	15,049	45,617
Jasper	23,284,010	2,324,320	25,608,330	25,608	35,895
Kershaw	46,778,737	11,010,500	57,789,237	57,789	71,552
Lancaster	14,052,593	4,513,950	18,566,543	18,567	34,391
Laurens	18,935,490	9,216,919	28,152,409	28,152	42,507
Lee	4,177,555	2,211,300	6,388,855	6,389	51,355
Lexington	12,879,290	4,581,200	17,460,490	17,460	35,633
McCormick	4,434,825	2,270,500	6,705,325	6,705	10,533
Marion	4,634,945	872,500	5,507,445	5,507	38,023
Marlboro	10,743,530	3,507,100	14,250,630	14,251	41,535
Newberry	16,058,523	3,573,400	19,631,923	19,632	26,172
Oconee	8,509,835	2,069,750	10,579,585	10,580	49,783
Orangeburg	22,249,150	8,029,700	30,278,850	30,279	86,728
Pickens	9,131,355	2,768,625	11,899,980	11,900	41,477
Richland	18,971,028	4,442,500	23,413,528	23,414	60,667
Saluda	4,364,121	2,179,600	6,543,721	6,544	21,603
Spartanburg	13,808,999	7,895,300	21,704,299	21,704	38,659
Sumter	24,567,112	3,568,300	28,135,412	28,135	43,300
Union	13,205,399	2,788,875	15,994,274	15,994	46,744
Williamsburg	6,759,065	1,652,000	8,411,065	8,411	58,191
York	16,126,506	5,828,920	21,955,426	21,955	53,281
Totals	744,258,250	187,516,418	931,774,668	931,773	**2,056,804

* The total includes 18,100,000 loblolly pine seedlings which were custom grown for South Carolina by TVA nurseries.

** Estimates of "1958 Conservation Needs Committee."

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

ORGANIZATION CHART



STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1960 TO JUNE 30, 1961



CHARLES H. FLORY, State Forester
COLUMBIA, S. C.

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To Honorable Ernest F. Hollings, Governor, and to the General Assembly of South Carolina:

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual reports upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1960 to June 30, 1961.

Respectfully submitted,

STATE COMMISSION OF FORESTRY,
Fulton B. Creech, *Chairman.*

PERSONNEL

S. C. STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1961)

Members of the Commission

Fulton B. Creech, Chairman, Sumter

Dr. Robert C. Edwards, President, Clemson College, Clemson

C. H. Niederhof, Charleston

A. B. Taylor, Jr., Spartanburg

John C. Pracht, Greenwood

Secretary of the Commission

Chas. H. Flory, State Forester

DIVISION OF STATE PARKS

C. West Jacocks, State Park Director

E. R. Vreeland, Assistant State Park Director—Operations

F. Marion Dwight, Assistant State Park Director—Historical

State Park Superintendents

Aiken State Park, James B. Cothran, Windsor

Andrew Jackson Historical State Park, Cecil S. Hayes, Route 1, Lancaster

Barnwell State Park, Mrs. D. I. Ross, Blackville

*Cheraw State Park, George T. Holder, Cheraw

Chester State Park, Clarence Doster, Chester

Croft State Park, J. E. Thornton, Spartanburg

Edisto Beach State Park, William D. Tidwell, Edisto Island

Givhans Ferry State Park, William Wiggins, Jr., Ridgeville

*Greenwood State Park, Keith M. Fleischmann, Ninety Six

*Hunting Island State Park, Van W. Pressley, Frogmore

Huntington State Park, Norman B. Cooler, Pawleys Island

Kings Mountain State Park, Raymond M. Sisk, Kings Creek

Lee State Park, Joe Frank Watson, Bishopville

Little Pee Dee State Park, LaFon Norton, Dillon

Myrtle Beach State Park, T. F. Barbie, Jr., Myrtle Beach

Oconee State Park, James W. Ray, Walhalla

Old Dorchester, Henry N. P. Bond, Jr., Summerville

Paris Mountain State Park, Ed. H. Miller, Greenville

*Pleasant Ridge State Park, LeRoy Smith, Cleveland

*Poinsett State Park, L. Storm Bailey, Wedgefield

Rivers Bridge State Park, E. B. Mobley, Ehrhardt

Santee State Park, G. B. LaBoon, Santee

Sesqui-Centennial State Park, Marshall D. Holder, Columbia

Table Rock State Park, Robert G. Jones, Pickens

Colleton Wayside Park, Willard Risher, Canadys

* Includes area for Negroes.

DIVISION OF FORESTRY

Branch of Administration

E. B. Price, Assistant State Forester

Virginia S. Holmes, Fiscal-Personnel Assistant

Delford F. Furney, Purchase-Property Assistant

Warehouse, Sumter

J. P. Watson, Warehouseman

Branch of Information and Education

Walter T. Ahearn, Assistant State Forester

Nelson L. Peach, Information and Education Assistant

Claude F. Barden, Information and Education Assistant

Sign and Woodworking Shop, Sumter

Olin M. Ballentine, Foreman

Branch of Forest Management

E. C. Pickens, Assistant State Forester

Howard R. Scott, Management Assistant

E. L. Middleswart, Management Assistant

Sand Hills State Forest, Patrick

Randolph B. Lee, Director

Chas. F. Moore, II, Forester

Joel I. Canada, Forester

Clyde C. Rice, Forester

Manchester State Forest, Wedgefield

Robert N. McCombs, Director

Branch of Nurseries

A. A. Lehocky, Assistant State Forester

Horace L. Tilghman Nursery, Wedgefield

L. M. Staley, Nurseryman

Piedmont Nursery, Pickens

E. W. Cooler, Jr., Nurseryman

Coastal Nursery, St. George

C. Hampton Durr, Nurseryman

Ridge Nursery, Trenton

David D. Brown, Nurseryman

Branch of Forest Fire Control

John R. Tiller, Assistant State Forester

J. T. Hance, Fire Control Assistant

John M. Shirer, Fire Control Assistant

Hugh M. Westbury, Fire Control Assistant
 J. M. Geddings, Assistant, Fire Control Communications
 R. M. Littlejohn, Assistant, Fire Control Communications
 Equipment and Repair Shop, Sumter
 O. P. Woodward, Supervising Mechanic

District Offices

Chauncey R. Nichols, District Forester, Camden
 R. B. Rhett, Forester, Camden
 Daniel D. Riddick, Forester, Camden
 Roger L. Hagwood, Jr., Forester, Camden
 C. C. Canada, Forester, Camden
 W. O. Morgan, District Ranger, Camden
 (Camden District includes counties of: Chesterfield, Ker-
 shaw, Lancaster, Lee, Richland and Sumter)

Alvin E. Kunz, District Forester, Florence
 Kenneth G. Clemens, Forester, Florence
 John R. Allison, Forester, Conway
 E. G. Lambrecht, Forester, Florence
 Jack F. Young, Forester, Bennettsville
 Fred W. Watson, Jr., District Ranger, Florence
 (Florence District includes counties of: Darlington, Dillon,
 Florence, Horry, Marion and Marlboro)

Fred W. Horn, District Forester, Kingstree
 Robert J. Gould, Forester, Kingstree
 Maurice C. Coleman, Forester, Kingstree
 John R. Grubbs, District Ranger, Kingstree
 (Kingstree District includes counties of: Berkeley, Claren-
 don, Georgetown and Williamsburg)

John E. Graham, District Forester, Newberry
 Donald W. Horton, Forester, Greenwood
 W. B. Lawrence, Jr., Forester, Newberry
 Wilbur H. Reames, Forester, Newberry
 Clifton T. Carter, Timber Marker, Chester
 Melton Wall, District Ranger, Newberry
 (Newberry District includes counties of: Abbeville, Chester,
 Edgefield, Fairfield, Greenwood, Laurens, McCormick,
 Newberry and Saluda)

Marvin T. Gaffney, District Forester, Orangeburg
 Robert C. Simmons, Forester, Orangeburg
 Henry G. Brown, Forester, Lexington

James A. Miller, Forester, Orangeburg
 Wray E. Freeman, Forester, Orangeburg
 Robert E. Beach, Forester, Orangeburg
 Adrian Lee Pardue, District Ranger, Aiken
 (Orangeburg District includes counties of: Aiken, Allendale,
 Bamberg, Barnwell, Calhoun, Lexington and Orange-
 burg)

W. M. Lindsey, District Forester, Spartanburg
 Ralph W. Evans, Forester, Pickens
 J. Harlan McLees, Forester, Spartanburg
 Legare M. Duke, Forester, Spartanburg
 John W. Little, Forester, Walhalla
 C. W. Nuite, Forester, Pickens
 Chas. E. Turpin, District Ranger, Spartanburg
 (Spartanburg District includes counties of: Anderson,
 Cherokee, Greenville, Oconee, Pickens, Spartanburg,
 Union and York)

C. C. Rountree, Jr., District Forester, Walterboro
 Paul B. Carson, Forester, Walterboro
 Phil A. Hadaway, Jr., Forester, Walterboro
 Oscar R. Sampson, Forester, Walterboro
 E. H. Benton, District Ranger, Walterboro
 (Walterboro District includes counties of: Beaufort, Charles-
 ton, Colleton, Dorchester, Hampton and Jasper)

Protection Units

Abbeville Unit Ranger, Charlie Shaw, Lowndesville
 Aiken Unit Ranger, J. Ramie Yonce, Aiken
 Allendale Unit Ranger, W. W. Brunson, Allendale
 Anderson Unit Ranger, John E. Embler, Anderson
 Bamberg Unit Ranger, P. H. Cave, Olar
 Barnwell Unit Ranger, W. R. Moore, Barnwell
 Beaufort Unit Ranger, W. Heyward Graves, Beaufort
 Berkeley Unit Ranger, C. L. Wyndham, Moncks Corner
 Calhoun Unit Ranger, Hampie F. Ott, St. Matthews
 Charleston Unit Ranger, J. I. Garvin, Charleston
 Cherokee Unit Ranger, B. T. White, Gaffney
 Chester Acting Unit Ranger, C. W. Boulware, Chester
 Chesterfield Unit Ranger, W. M. Smith, Chesterfield
 Clarendon Unit Ranger, Elliott E. Rose, Manning
 Colleton Unit Ranger, Glenn B. Britt, Walterboro

Darlington Unit Ranger, Alton Yarborough, Darlington
 Dillon Unit Ranger, Ernest S. Oliver, Dillon
 Dorchester Unit Ranger, Carlisle Haskell Durr, St. George
 Edgefield Unit Ranger, S. G. Reel, Edgefield
 Fairfield Unit Ranger, R. E. Patrick, Winnsboro
 Florence Unit Ranger, Hugh Cusaac, Florence
 Georgetown Unit Ranger, Laurin T. Sessions, Georgetown
 Greenville Unit Ranger, G. G. Paris, Greenville
 Greenwood Unit Ranger, James C. Smith, Jr., Greenwood
 Hampton Unit Ranger, Buddy Waldo Hiers, Varnville
 Horry Unit Ranger, James T. Jones, Conway
 Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland
 Kershaw Unit Ranger, Chas. K. Young, Camden
 Lancaster Unit Ranger, A. A. Plyler, Lancaster
 Laurens Unit Ranger, Thos. F. Hill, Laurens
 Lee Unit Ranger, E. A. Hall, Bishopville
 Lexington Unit Ranger, V. S. Bickley, Lexington
 Marion Unit Ranger, Hoyt Collins, Marion
 Marlboro Unit Ranger, Jesse Adams, Jr., Bennettsville
 McCormick Unit Ranger, G. L. Sharpton, McCormick
 Newberry Unit Ranger, Marvin E. Wilson, Newberry
 Oconee Unit Ranger, James D. Thrift, Walhalla
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg
 Pickens Unit Ranger, C. H. Gravely, Pickens
 Richland Unit Ranger, T. W. Cooper, Columbia
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda
 Spartanburg Unit Ranger, Milton E. McMillin, Spartanburg
 Sumter Unit Ranger, L. G. Cubbage, Sumter
 Union Unit Ranger, James G. Long, Union
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree
 York Unit Ranger, E. G. Foster, York

FOREST MANAGEMENT

SUMMARY

The forest management program just about held its own during 1960-61. A peak year of field activity had occurred in 1959-60 with the assistance of the Soil Bank program. The major emphasis of the Commission's management program was directed toward assisting small private owners in the management of their woodland properties. The lack of forest management on these properties remains the No. 1 forestry problem in South Carolina.

The 1958 Forest Survey shows 77 per cent of South Carolina's woodland owned by small private landowners; public ownership 9 per cent and industry ownership 14 per cent.

Technical personnel of the State Commission of Forestry offer forest management assistance to any landowner in the State upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to either improve the stand, maintain it in a productive condition, harvest timber products, or any reforestation work necessary on idle or understocked areas.

During 1960-61 the Commission had a total of 24 men devoting full time to the forest management program, including the small watershed activities. These 24 men assisted 1,954 landowners with primary forest management plans and handled 1,327 requests for the Agricultural Conservation Program. These men also marked 411 tracts covering 13,137 acres amounting to 13,463,463 board feet and 8,046 cords. There were five active watershed projects on which critical area planting and gully control work was carried out. These same men made field checks on approximately 2,000 separate Conservation Reserve plantings.

The present personnel were unable to keep up with requests from landowners for forest management assistance. In some areas requests could not be handled for four to six months after being received. A minimum of four additional men is needed at present just to keep up with requests. This assistance to small woodland owners is one of the most important ways to reach the small landowners with forest information and assistance.

On large properties where considerable timber marking work

is needed, Commission foresters encourage the landowners to employ private consulting foresters. Commission foresters also work closely with industry conservation foresters who give direct assistance to landowners.

The Commission has followed the policy of recommending consulting foresters to be employed by landowners wherever possible. We believe that forestry can and will pay its own way when areas are brought into full production. It is believed that the large number of consulting foresters in South Carolina (46) is one of the primary reasons why South Carolina is one of the more progressive states in the nation in forest management. The Commission will continue its policy of encouraging the employment of consulting foresters on all properties where the cost to employ a consultant will be justified. Commission foresters will continue to concentrate their activities to promote interest among small landowners in doing better management work and in direct assistance to those with small woodland areas.

The Commission experienced a very small turnover of technical personnel during the year. There was some lost time due to military service commitments; however, the efficiency in general was above average due to the stable employment.

One hundred forty-two landowners were referred to consulting foresters and seventy-two landowners were referred to industry foresters by Commission personnel to handle woodland properties where initial field examinations were made by Commission foresters.

Landowners continue to receive reasonably good prices for selectively marked sawtimber and pulpwood. The demand for all forest products was somewhat lower and prices were down as much as 30 per cent in some areas for lower quality products. A more detailed report of this will be found in the next few pages of this report.

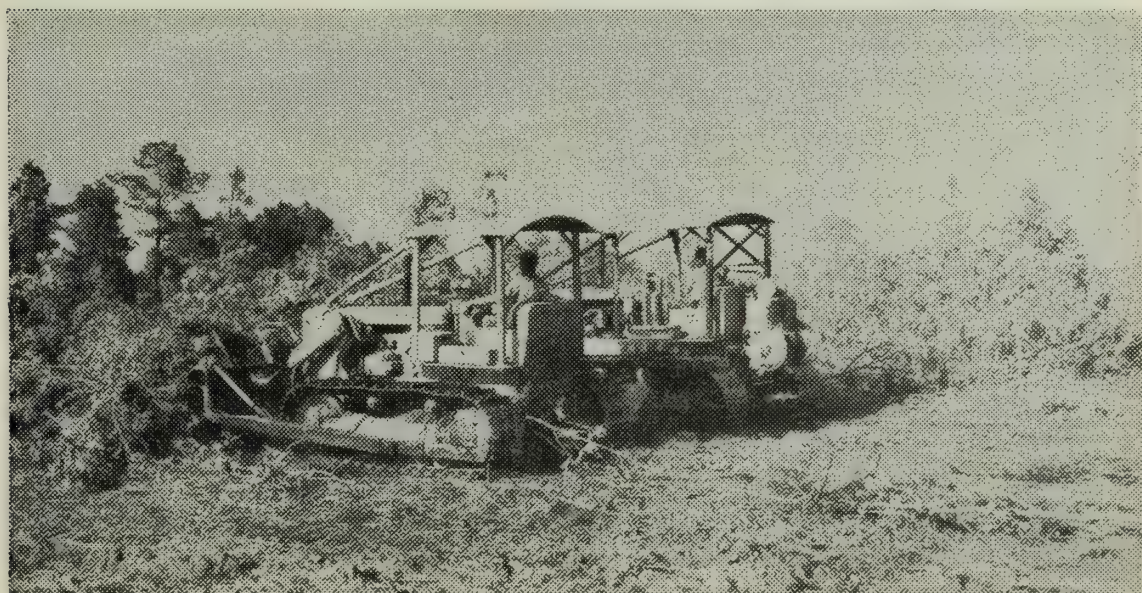
The three-way agreement for cooperative control of forest insects and disease between Clemson College, the U. S. Forest Service, and the Commission of Forestry was continued. Clemson has employed a Forest Entomologist and Pathologist and will plan and coordinate protection and control activities. The Forestry Commission will assist in detection and control, coordinating its activities with Clemson College. The U. S. Forest Service will also assist both with federal funds and technical personnel as conditions warrant.

Clemson College, through its technical staff, has expanded its research efforts on forestry. The Commission is already working with Clemson on a number of forest management research studies. Other projects are being discussed and will be undertaken in 1961-62.

Five active small watershed projects operated during 1960-61. One additional project, the Broadmouth Creek Area in Anderson County, has been approved and will begin operation in 1961-62. The Commission of Forestry is responsible for all technical forestry work on these watershed areas, including tree planting on critically eroded areas.

Working agreements were completed with an additional number of the state's Soil Conservation Districts, bringing the total to thirty-five agreements now signed. Only ten Soil Conservation Districts do not have a working agreement at present. It is expected that these agreements will be completed soon.

The State Commission of Forestry continued to operate four state forests. The combined area of these state forests represents about one per cent of the total forest area in the state. Experimental and demonstration plantings, forest management experiments and other activities were continued on these forests. Since about 30 per cent of the total land area in the state forests is still in an unproductive state, major emphasis continued to be directed toward reforesting this non-productive area. A total of 5,423 acres of scrub oak land was cleared during the year and has been, or will be, planted to pine. During the past ten years



More than 5,000 acres of scrub oak land on the state forests were cleared in preparation for planting pines under special authorization from the Legislature.

a total of 11,819 acres of state forest lands has been cleared of worthless scrub oak and converted to pine stands.

The 1960 Legislature passed an act enabling the Forestry Commission to use state forest receipts to rehabilitate approximately 40,000 acres of scrub oak lands on Manchester and Sand Hills State Forest. This program is to be completed in five to seven years and will result in considerable financial returns to the State of South Carolina. This act will enable the Forestry Commission to overcome the major problem of forest management now existing on the state forests. More than 5,000 acres were cleared of scrub oak ready for tree planting during the year as a result of this act.

MANAGEMENT ASSISTANCE

The twenty-four man years of forest management technical time of field foresters was directed toward assisting private landowners with their woodland information problems. The three Clemson College Extension Foresters assisted in this program, primarily with promotional and demonstrational effort. The details of this service and accomplishments during the year are discussed in the following paragraphs.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is fifty cents per thousand board feet or thirteen cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seedbed preparation, control of the "Brown Spot" disease

of longleaf pine, and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis with the landowner of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and District Office technical



Foresters for the Commission of Forestry selectively marked more than 13 million board feet of sawtimber. Here the forester and the landowner inspect a tract from which the marked timber has been cut.

forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,100 telephone calls regarding insect and disease control and made more than 400 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

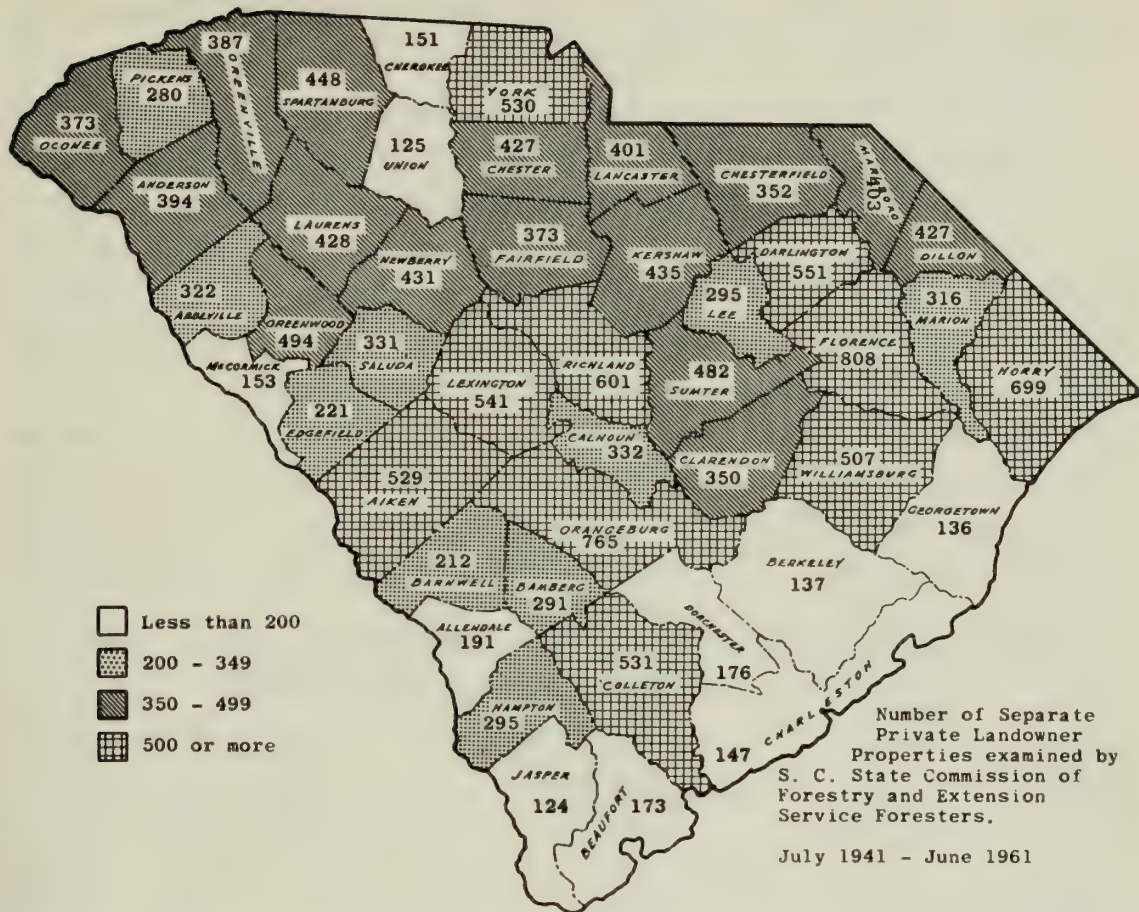
During the year Commission foresters made 1,954 examinations on 246,372 acres of forest land, and selectively marked 13,463,463 board feet and 8,046 cords for 411 landowners on 13,137 acres of forest land. The following table shows the continuous increase in woodland examinations and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature.

FOREST MANAGEMENT ASSISTANCE

Summary by Years

	Exams. & Recommendations		No. of Land- owners	Timber Marking		Cords Pulp- wood
	No. of Land- owners	Woodland Acreage		Woodland Acreage	Bd. Ft. Timber	
1941-42	213	37,500	84	14,792	8,271,202	-----
1942-43	145	62,204	59	8,769	13,851,707	862
1943-44	170	85,300	121	15,407	25,515,145	1,231
1944-45	309	161,412	108	15,359	16,033,407	639
1945-46	256	80,800	78	12,591	15,292,532	546
1946-47	445	105,896	203	18,408	24,735,103	4,237
1947-48	545	148,577	208	13,477	19,788,388	3,500
1948-49	706	126,600	235	13,768	22,009,336	4,429
1949-50	880	163,334	242	8,427	13,283,940	3,385
1950-51	998	173,057	339	14,275	19,634,153	3,896
1951-52	919	170,948	288	11,931	18,031,822	3,089
1952-53	931	142,054	315	12,109	16,332,715	3,935
1953-54	945	143,347	331	8,864	12,264,641	8,467
1954-55	1,166	184,754	399	9,477	13,875,377	5,162
1955-56	1,322	191,143	393	10,973	16,246,795	9,167
1956-57	1,148	163,479	304	8,248	11,365,157	6,008
1957-58	1,423	208,821	394	12,305	14,443,209	7,881
1958-59	1,693	196,529	403	14,374	18,552,478	6,419
1959-60	2,015	230,691	521	17,936	19,920,743	9,432
1960-61	1,954	246,372	411	13,137	13,463,463	8,046
Totals	18,183	3,022,818	5,436	254,627	332,911,313	90,331

Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to destroy the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees. This cull tree removal program is one of the largest forest management problems facing South Carolina woodland owners. Com-



mission foresters will continue to place more emphasis on this problem.

Field foresters of the Commission are responsible to check all areas where landowners request forest practices to be carried out on their property under the Agricultural Conservation Program. Listed below are the number of properties approved for various practices and the acres of forest practices accomplished under this program for 1960.

Tree planting	2,156 landowners	49,793 acres planted
(includes clearing and old field planting)		
Improvement of a stand of trees	272 landowners	12,668 acres
Construction of firebreaks	278 landowners	5,535,000 linear feet

Commission foresters were unable to service all of the requests from landowners. The tremendous increase in requests to assist landowners with clearing scrub oak land, timber stand improvement work or cull tree control, tree planting, etc., plus an increase in requests for sawtimber and pulpwood marking, has resulted in many requests not being handled for three to six months after being received. Some landowners do not wait to receive the assistance and, consequently, poor management practices result. A minimum of four foresters is needed at present

to just keep up with present requests for service from small woodland owners.

Commission foresters and Extension foresters continued to follow the practice of referring all larger jobs and some of the smaller jobs to consulting foresters and industry foresters wherever practical. Our records indicate 142 jobs referred to consulting foresters where properties were examined by Commission or Extension foresters, and it is estimated that about 300 additional jobs were referred directly to consulting foresters where original contact was made by Commission or Extension Personnel. Seventy-two jobs were referred to industrial foresters.

Stumpage prices received from marked sawtimber and pulpwood for the past five years are shown in the following table:

**SAWTIMBER AND PULPWOOD STUMPAGE PRICES FOR
SOUTH CAROLINA—FIVE YEAR PERIOD**

Fiscal Year	Weighted Average stumpage price per M Bd. Ft.	Weighted Average stumpage price per standard cord
1955-56	\$35.91	\$4.89
1956-57	37.37	5.49
1957-58	35.72	5.86
1958-59	37.00	5.75
1959-60	39.22	6.76
1960-61	36.93	6.37

Sawtimber and pulpwood prices showed a definite downward tendency during most of the year with some recovery indicated in May and June. The average price for marked sawtimber on sales reported showed a 10% decline and average price of pulpwood (stumpage) showed a 6% decline. In some localities in the state the downward trend was more pronounced than was shown by these reports. The demand at the end of the year appeared to be steady, even though an upward trend had not yet appeared. Landowners who sold timber without forestry advice and assistance averaged far less for their timber than those who did receive forestry assistance.

A record high production of pulpwood occurred in the state in 1960 even though prices showed some downward trend; however, this record high was achieved through the use of more low-grade hardwood pulp (386.8 M cds.) and through the utilization of chip wood (288.6 M cds.) from sawmill residue, with

only a very slight increase in round pine pulpwood production. There was little change in the demand and prices paid for veneer, poles and fence posts.

Lumber Production in South Carolina, 1936 to 1960
(In Million Board Feet)

<i>Year</i>	<i>Softwoods</i>	<i>Hardwoods</i>	<i>Total</i>
1936 -----	610.2	169.8	780.0
1937 -----	572.6	167.4	740.0
1938 -----	577.1	182.9	760.0
1939 -----	643.5	200.5	844.0
1940 -----	682.3	190.2	872.5
1941 -----	879.9	231.0	1,110.9
1942 -----	886.3	196.9	1,083.2
1943 -----	800.3	200.9	1,001.2
1944 -----	708.0	194.1	902.1
1945 -----	550.6	176.1	726.7
1946 -----	748.5	245.0	993.5
1947 -----	685.7	185.4	871.1
1948 -----	-----	-----	-----
1949 -----	636.7	167.4	804.1
1950 -----	719.8	231.6	951.4
1951 -----	678.0	234.8	912.8
1952 -----	722.0	236.0	958.0
1953 -----	705.0	216.0	921.0
1954 -----	626.0	190.9	816.9
1955 -----	621.0	201.0	822.0
1956 -----	628.0	199.0	827.0
1957 -----	650.0	245.4	895.4
*1958 -----	630.0	220.0	850.0
*1959 -----	650.0	220.0	870.0
*1960 -----	630.0	220.0	850.0

* Estimated

Veneer cut in South Carolina adds up to about 150 million board feet annually. Poles and piling and cooperage amount to approximately 40 million board feet annually.

Round Pulpwood Production in South Carolina, 1936 to 1960
(In Thousand Cords)

<i>Year</i>	<i>Pine</i>	<i>Hardwood</i>	<i>Total</i>
1936 -----	35.8	12.8	48.6
1937 -----	364.4	29.3	393.7
1938 -----	262.7	21.6	384.3
1939 -----	533.6	17.0	550.6
1940 -----	602.8	67.5	670.3
1941 -----	744.0	55.5	799.5
1942 -----	863.0	44.2	907.2
1943 -----	954.0	32.6	986.6
1944 -----	1,010.0	43.5	1,053.5
1945 -----	823.8	53.7	877.5
1946 -----	909.2	112.8	1,022.0
1947 -----	862.6	85.7	948.3
1948 -----	1,000.1	108.4	1,108.5
1949 -----	913.5	98.7	1,012.2
1950 -----	1,068.6	113.8	1,182.4
1951 -----	1,105.2	145.8	1,251.0
1952 -----	1,132.5	143.2	1,275.7
1953 -----	1,273.4	172.8	1,446.2
1954 -----	1,160.5	170.4	1,330.9
1955 -----	1,268.7	244.6	1,513.3
1956 -----	1,582.9	223.7	1,806.6
1957 -----	1,384.7	270.3	1,655.0
1958 -----	1,346.3	246.4	1,592.7
1959 -----	1,342.1	367.8	1,709.9
1960 -----	1,515.0	386.8	1,901.8

No new large sawmills located within the state during the year. Mills requiring large logs and high quality veneer logs are finding it more difficult to locate suitable standing timber.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired either full time or part-time foresters.

The pulp companies continued to furnish the services of their

foresters to assist landowners with proper thinning of pulpwood. These foresters help sell private owners on the idea of "sustained yield" in managing their woodlands. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

Commission Foresters checked in the field approximately 400 properties for insect and disease damage. Recommendations were given the owners regarding treatments to control or check the spread of the disease or insects. More than 1,100 telephone calls were answered regarding insect or disease where no field checks were necessary. There were no epidemics of disease or insects reported anywhere in the state.

The working agreement between the State Crop Pest Commission and the Commission of Forestry was continued.

COOPERATIVE FOREST MANAGEMENT

During the year, sixteen Cooperative Forest Management Projects operated in the state. The demand by private owners for services offered by these men was greater than could be met during the year. A minimum of four new men is needed now just to keep up with requests that are being received. A summary of the work accomplished by these Cooperative Forest Management Foresters is included in the forest management assistance tables shown in this report. Twenty-three and eight-tenths (23.8) total technical man years was devoted to forest management activities, including Cooperative Forest Management, ACP work, Conservation Reserve Program, and the Watershed Program.

WATERSHED PROJECTS

A program to control water on small watersheds and to protect from overflow the bottomland along the smaller streams was initiated some years ago through Public Law 566. The Soil Conservation Service and U. S. Forest Service are the primary action agencies for this program. The U. S. Forest Service has transferred their responsibilities to the S. C. State Commission of Forestry through an agreement. There are four Public Law 566 projects in operation in the state and the Pilot Watershed Project is being continued.

There have been preliminary examinations on twenty-three separate areas to determine the feasibility of beginning new watershed improvement works on these areas. One new project (The Broadmouth Creek area in Anderson County) was set up for action during 1961-62. A statement follows describing some of the activities accomplished on the five areas in operation.

TWELVE MILE CREEK

The Pilot Watershed on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the U. S. Forest Service and the Soil Conservation Service. A total of 280,625 seedlings was planted on 300.0 acres of badly eroded and gullied land within the project boundaries. A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover could be established. In addition to this work, the project forester assisted eleven landowners in properly marking and selling sawtimber and pulpwood. A total of 511,000 board feet of sawtimber and 214 cords of pulpwood was marked for these eleven owners. A total of twelve woodland examinations and plans were made for these owners. However, many tracts were marked for pulpwood thinning by pulpwood company foresters with the project forester checking the work. In addition, recommendations for planting, brush control and other measures needed on some of the woodland areas were given to a number of landowners. A grand total of 3,806.7 acres have been planted on critical areas in this project.

CONEROSS CREEK WATERSHED PROJECT

The Coneross Creek Project completed its fourth year's operation. The work on this project was under the supervision of R. W. Evans, the same forester who handled the Twelve Mile Creek Project. Woodland management landowner assistance inside the project area was handled by Cooperative Forest Management Forester John Little, who has headquarters at Walhalla.

The Coneross Creek area is located just west of Walhalla in Oconee County.

Trees were planted on twenty-six separate farms. A total of 132,500 trees was planted on 158 acres. A total of nineteen land examinations was made covering 1,287 acres on the watershed area. Eleven marking jobs were completed. With this year's

planting, a grand total of 2,113 acres of critical area has been planted to trees.

BRUSHY CREEK WATERSHED PROJECT

The Brushy Creek Project completed the third year's operation. A total of 89,900 loblolly pine seedlings was planted on 89.4 acres of critical area. These trees were planted on twenty-one separate properties. A grand total of 410,200 seedlings has been planted on 424 acres in the past three years. Three woodland examinations and two marking jobs were completed on the watershed area. Additional on-the-ground assistance was given landowners in making forest products sales. The project forester also assisted in checking properties under the A. S. C. Program and Conservation Reserve Program.

WATEREE CREEK WATERSHED PROJECT

The Wateree Creek Program got underway in the fall of 1959. Only forty acres were planted during the first year's operation. In 1960-61, the Soil Conservation Service completed farm plans on very few properties and the forestry phases of



Love grass and pines were planted on this severely eroded area on the Brushy Creek watershed two years ago and the healing process is started.

operation were confined to some site preparation and gully control work. The planting program will catch up in 1961-62.

The Watershed Project forester made woodland examinations for five owners covering 815 acres, marked sawtimber for three owners, assisted with tree planting on four properties and with insect and disease control on two properties.

STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

Cassatt State Forest	462 acres
Harbison State Forest	2,202 acres
Manchester State Forest	28,830 acres
Sand Hills State Forest	92,000 acres
<hr/>	
Total	123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective continues to be the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops to reduce the competition so that pine will survive and grow. Approximately 11,819 acres of scrub oak land have been cleared and replanted to pine in the past ten years. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.

The 1960 Legislature passed an act enabling the Commission to use receipts from state forests to speed up the reclamation of scrub oak lands. This program enabled the state to clear approximately 5,000 acres during 1961-62. The detailed accomplishments as a result of this program are included in the write-up for individual state forests.

The forester who has been employed to coordinate research and experimental work for the Commission was continued this

year. Most of the Commission's research efforts were through cooperative studies with either Clemson College or the Southeastern Forest Experiment Station. Some of the studies established or continued are listed below:

1. Comparison of growth on old fields versus clearings.
2. Furrowing for better survival.
3. Geographic seed source comparisons.
4. Spacing study of eight spacings for slash pine.
5. A test of conifer species suitable for sandhill planting on cleared land and old fields.
6. Thinning study of slash pine.
7. Text of direct seeding slash pine.
8. Control of scrub oak by chemical means.
9. Test of species suitable for Christmas trees.
10. Test of direct seeding longleaf and slash pine.
11. Test of control of scrub oak with 2,4,5-T applied with mist blower.
12. Test of control of scrub oak with various chemicals applied with mist blower.
13. Test of control of scrub oak with Dybar pellets.

Detailed reports of activities on each of the state forests follows:

CASSATT STATE FOREST

This forest lies about two and one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a fire tower and dwelling for the towerman was erected. Also, a small amount of pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained annually a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property.

Sixty-six thousand slash pines were planted on cleared scrub oak sites during the year. This brings all of this forest into production and only a small amount of timber stand improvement work is needed to maintain a good state of production.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organiza-

tion is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the fifteen years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a substantial amount to the State Treasury. No large timber sale was made during the year. A small pulpwood sale brought \$351.76 to the State Treasury.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state on June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat and to get all records of transfer completed. A survey has been completed for approximately 60 per cent of the boundary lines during the last four years. Approximately 10 per cent of this forest is still in an unproductive state (not including marshy land). It is on this area that the major silvicultural activities are being directed. Most of the old fields except those being farmed have been planted. The clearing of scrub oak lands and planting to pine is proceeding rapidly and will be completed within the next three or four years.

Fire Protection:

Only six fires occurred during the year, burning a total of 11.4 acres. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter unit fire control organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners in the area in the prevention, pre-suppression and suppression of forest fires. The fire record since 1947 has been excellent for Manchester State Forest.

Fish and Wildlife:

Hunting and fishing are handled by a cooperative agreement with the Sumter County Game and Fish Association and issues

permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed. State Forest personnel plant wildlife food strips and patches with the cost being paid by the Sumter Game and Fish Association.

Agriculture:

Thirty-one tenants rented 948 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, approximately 122 acres of newly cleared scrub oak land were rented for one season to watermelon growers.

Tree Planting:

A total of 521,000 trees were planted on the forest during the year. Planting by species was as follows:

Loblolly	36,000
Longleaf	9,000
Slash	476,000

In addition, approximately 88 acres were direct seeded with slash or longleaf pine seed in an effort to determine if direct seeding can be successfully used as a method of regeneration in the sand hills.

Forest Products Sold and Other Receipts:

Sawtimber—941,803 board feet	\$30,097.21
Pulpwood and Posts—5,121.67 cords	40,374.29
Rentals and Leases—Misc.	6,918.80
<hr/>	
Total	\$77,390.30

Silvicultural Practices:

With the aid of funds made available by the 1960 Legislature the major job of reclaiming scrub oak lands proceeded on schedule. Nine hundred seventy-three acres were cleared and plowed; 122 acres of this were rented to watermelon growers. Eighty-eight acres were furrowed and seeded to longleaf and slash pine. The total area that has now been cleared of scrub oak and planted or direct seeded to pine on this forest is 3,295 acres.

The continued increase of *Fomes annosus* root rot among planted slash pine made it necessary that all stumps which were

left in thinning operations be treated with creosote in an attempt to check the spread of the disease. At present this is the only means of control known and it only prevents the spread and does not kill the disease.

Salvage of all blow-down timber following hurricane "Donna" was completed with very little actual loss incurred.

Timber stand improvement work which released the pines from competition with poor quality hardwoods was completed on 136 acres.

Maintenance and Repair:

Minor repairs were made on all headquarters buildings and on four tenant houses. Major repairs were made on the tractor and rollers on the D-7 tractor and the TD-9 tractor was completely overhauled. Roads, truck trails and bridges were repaired as necessary.

Demonstrations and Meetings:

The Burnt Gin group camp was used by Consulting Foresters and these foresters visited the state forest to observe the work that is being done. In addition, Clemson's summer camp students visited the area on a two-day training field trip. A forest management, fire control and nursery demonstration was given on the forest to approximately 400 4-H boys and girls. A number of individual landowners, foresters and others visited the area during the year.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, possible damage will be confined to a few hundred acres. The lease is to run until July 30, 1962. The State Forestry Commission is being paid \$3,074 per year for this lease.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease.

Before the area was acquired by the Government, it was heavily cut over, badly burned and generally abused. As a result, major activities for the present and for several years to come consist of tree planting, adequate fire protection, and other good forestry practices aimed at building up the productivity of the land and increasing the forest stand. Almost one-third of the forest remains in scrub oak. The reclamation of this scrub oak land is the major silvicultural objective at the present.

Tree Planting:

Most areas were machine planted, however, some hand planting was necessary in rough cleared and on experimental plots. Three hundred twenty-four thousand slash pine were planted in old fields and 562,000 slash pine were planted in scrub oak clearings. Two hundred eighty-six thousand longleaf pine were planted in clearings, most of this longleaf was planted on the Fish and Wildlife Refuge portion of the property. The total planted on the forest during 1960-61 was 1,172,000 seedlings. In addition, 108 acres was direct seeded with longleaf pine seed.

The grand total planted on the forest since its establishment amounts to 16,033,352 seedlings. Approximately 13,000 acres have been successfully re-established to pine.

Forest Products Sold and Other Receipts:

Pulpwood and posts—5,326 cords	
Sawtimber—3,444,258 board feet	\$152,848.69
Watermelon land rentals	
Other agricultural lands and misc. receipts	18,755.36
Total	<hr/> \$171,604.05

Fire Protection:

During the year 13 fires burned 100.2 acres. The fire plan which was developed for the Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield unit fire control organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

Recreation:

The Sugar Loaf Mountain Recreation area for white people

continued to receive heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, lake fireplaces, a flowing well, parking areas and latrines. The 15 Boy Scout troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing, but no swimming is allowed.

The State Parks Division continued improvement work on Campbell's Lake Negro State Park.

Fish and Wildlife:

No hunting was allowed on either the State Forest portion or the Wildlife Refuge portion of the Sand Hills area. An effort is being made to build up wildlife stocking in doves, quail, deer, turkey and other native game and as soon as it appears that sufficient quantities of any of these species are available, organized hunting will be allowed on the State Forest portion of the property.

Fishing is allowed in Sexton's Pond and Sugar Loaf Mountain Lake. Campbell's Lake is open to fishing and reserved exclusively for Negroes.

Agricultural Lands:

Thirteen tenants rent and farm 800 acres of agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers have been abandoned and have been planted to pine trees. More of this land will be returned to trees.

Silvicultural Practices:

Under the program authorized by the Legislature to clear scrub oak areas and plant them to pine, 4,380 acres were cleared. Not all of this cleared land was planted since a large part was rented to watermelon growers for one season. The clearing technique is the same as has been used in the past. A root rake pushes the aerial portions of the scrub oak into wind rows which is then burned; then the area is plowed with heavy discs. The grand total that has been cleared of scrub oak on this forest is now 8,524 acres. It is expected that approximately 5,000 acres will be cleared during 1961-62.

Maintenance and Repair:

Some repair work was done to Sugar Loaf Mountain recreation area. The general condition of headquarters and director's residence are good and only routine repairs made during the year. A considerable effort was necessary to maintain truck trails, bridges and fire breaks. Some major overhaul on heavy tractors was necessary.

Boundary Surveying:

No official boundary surveying was accomplished during the year. There were one or two instances where some dispute occurred as to location of property boundaries, however, most of these were resolved. There is need for boundary survey and marking on a large part of the area.

NURSERIES

SUMMARY

The Branch of Nurseries is responsible for: all Commission nursery and reforestation programs, including tree seed collection and purchase, seed extraction and storage, operation of the nurseries, seedling distribution, nursery research activities, survival records, obtaining and processing tree seedling orders, preparing budgets, and other fiscal procedures in obtaining payments for seedlings; coordination of the Commission's reforestation program with ASC, and other agencies, including the Extension Service, Soil Conservation Districts, Vocational Agriculture, etc.; the future establishment, construction, development and operation of any new nurseries established in the state, and revision or development of additional new reforestation policies needed by the Commission.

Demand for seedlings remained at a high level, and even though a near record number of seedlings was produced the Commission still could not satisfy all incoming orders. Interest in tree planting has stemmed not only as a result of the Conservation Reserve Program but also from scrub oak clearing in the sand hills section of the state, idle farm land due to industrial employment of landowners, higher timber returns, etc.

Since 1928, a period of some 33 years, one billion ninety million (1,090,105,243) forest tree seedlings have been planted in South Carolina. Expansion of the reforestation program has



Since 1928 more than one billion forest tree seedlings have been planted in South Carolina. More than half of these have been planted within the last four years.

been so rapid that 55.5% of this total has been produced and distributed during the last four years. Part of this impetus in tree planting can be attributed to the Soil Bank program; however, the demand for other than Soil Bank planting has tripled in the last four years.

As a conservative estimate, a return of \$5.00 per acre per year can be applied to the approximately 1,000,000 acres established to plantations. This means a cash return of \$5,000,000 per year to landowners who have invested in tree planting and fire protection.

The forest survey, which was made in South Carolina during 1958, indicates that we still have approximately 1,900,000 acres which need planting without any site preparation. In addition, there are approximately 3½ million acres which need planting, but on which some site preparation will be necessary. Overall, therefore, our planting job is not near completion since there are some 5,400,000 acres which will have to be planted if they are to be productive. When this area is planted, returns to the landowners of South Carolina will be well in excess of \$32 million per year.

Arrangements have been formulated in cooperation with Clemson College to conduct a nursery research program within the state. This has proven to be a very desirable program in that local problems can be investigated on a local level. Most of the research findings in the past have been in the adjacent states and, therefore, are not always applicable to our state nurseries.

The Commission started taking applications for seedlings on March 1, 1960, and continued through July 31, 1960. After July 31, 1960, all seedling orders which had been received were compiled and compared to the tree seedling inventory of the four nurseries. This indicated the type of allocations that could be allowed to each seedling order. Basically, all orders were filled as requested. Excellent cooperation was obtained from the various agricultural agencies of the state in taking seedling orders and forwarding them to the Commission for further action. The cost of seedlings was changed to \$3.50 per thousand, f.o.b. nursery, or \$4.00 per thousand if the seedlings were sent to the landowner by express.

FOREST TREE NURSERIES ACTIVITIES

Distribution of Seedlings:

During this year, a grand total of 158,330,575 forest tree seedlings were distributed throughout the state. Of this total, 145,609,075 were distributed from the four state nurseries. This includes eight million slash pine seedlings purchased from North Carolina state nurseries.

Loblolly Pine	44,620,200
Slash Pine	99,220,050
Longleaf Pine	958,975
Red Cedar	87,675
Yellow Poplar	152,910
White Pine	463,675
Misc. Species	105,590
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Total	145,609,075

In addition to the above seedlings distributed by Commission nurseries, 12,721,500 seedlings were brought into the state or produced in the state by industry nurseries.

Catawba Timber Company	1,987,000
West Virginia Pulp and Paper Company	4,797,500
Lightsey Brothers	982,500
Canal Wood Corp.	400,000
Continental Can Company	3,055,000
Timberland Management Company	1,150,000
Union Bag-Camp Paper Company	330,000
International Paper Company	19,500
<hr/>	
Total	12,721,500

The number of tree seedling applications more than tripled from the average of 2,000 applications processed annually prior to 1957. A great deal of the demand for seedlings was caused by the Soil Bank Conservation Reserve Program. The demand for seedlings other than Conservation Reserve planting remained approximately the same as in previous years. Actually, 72 million trees were furnished to the Conservation Reserve Program and 74 million were distributed to other planters.

As a matter of information, the Conservation Reserve Program was started by the enactment of the Conservation Reserve Program Act by Congress in 1956. Following the passage of

this legislation, the Commission of Forestry entered into formal agreement with the U. S. Forest Service to establish nurseries and provide seedlings for planting under this program. Overall, it was to run for five years which meant 1960 was the last year that landowners could assign their acreage to Conservation Reserve. Through 1960 approximately 460,000 acres were placed in the Conservation Reserve, basically for tree planting. Through this year, the Commission has furnished all of the trees demanded for planting. It is anticipated that during 1960-61 approximately 25 million more seedlings will be needed to replant areas which do not have satisfactory stocking.

Tables No. 10 and No. 11 in the Appendix are a record of seedlings distributed by counties and class of ownership. Table No. 12 is the total acreage planted by counties and acres in need of planting. The following table records the number of seedlings planted in South Carolina by years, including out-of-state seedlings.

During the past 33 years more than a billion trees have been planted within the state.

Year	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Inc. other sources)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255

Year	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Inc. other sources)
1946-47	1,962,600	1,962,600
1947-48	11,356,990	11,356,990
1948-49	30,338,775	30,338,775
1949-50	29,501,955	29,501,955
1950-51	20,615,315	20,615,315
1951-52	16,619,000	16,619,000
1952-53	22,035,850	32,246,298
1953-54	36,210,100	42,852,314
1954-55	35,373,025	45,182,255
1955-56	34,413,550	42,931,755
1956-57	55,753,600	69,658,736
1957-58	60,846,200	93,369,084
1958-59	123,985,000	166,351,000
1959-60	147,146,365	187,516,418
1960-61	145,609,075	158,330,575
Total	913,039,573	1,090,105,243

Forest Tree Seed Collection:

A very poor crop of cones on slash, loblolly and longleaf pine existed throughout the state during the year; therefore, collection was very limited. Experience has proven that during poor crop years, low quality and quantity seed are obtained. Also cost per pound of seed can be triple that of good seed years. Overall, the collection period extended from the last week of August until the last week of October. During this period 758 bushels of pine cones and 192 bushels of yellow poplar were gathered. In obtaining tree seed throughout the state, the Commission of Forestry through its field offices locates private collectors in good seed-producing areas to obtain the quotas which are set.

This was the fourth year of operation of the new seed extractory located at the Tilghman Nursery. Excellent seed have been produced through this extractory with higher quantities and better quality seed being obtained per bushel of cones. Prior to the construction of the seed extractory, pine cones were processed in air curing sheds located at the old Sumter nursery. The average amount of seed obtained per bushel of cones in these air

curing sheds amounted to approximately 0.6 pounds. In the new extractory, more than 1.0 pounds were obtained per bushel in both loblolly and slash pine. The average cost of the seed to the state since the operation of the above mentioned extractory has been \$1.60 versus \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Each year, usually during July, sample plots are taken in each county of the state. From this information a cone crop forecast report is compiled. The report indicates that the crop for 1961-62 will be only 12% as good as the 1960-61 crop and, therefore, is rated as "very poor." Conversely the 1958-59 crop was rated "very good" and, accounts for processing the 23,518 bushels of pine cones during a good seed year.

Seedling Survival Examinations:

When forest tree seedlings are outplanted one year by the landowners of the state, approximately 10% of the seedlings planted in each county are sampled to determine the over-all state survival rate. Through these examinations the Forestry Commission can ascertain in what direction more education in tree planting should be directed in order to eliminate any plantation failures on the part of the landowners.

This past year the over-all state seedling survival rate was estimated at 67% compared to an over-all state average of 63% for several previous years. Part of this higher survival percentage can be attributed to the method employed presently in packaging and distributing seedlings from the state nurseries. The seedlings are now packaged so that "heeling in" is not necessary nor desirable at the planting site. This procedure has not only been a saving to the landowner by eliminating the re-handling of seedlings, but has also been an advantage to the seedlings themselves in that the plants were not disturbed through an additional handling.

Research:

Research studies have been effectively started in cooperation with Clemson College covering various problems concerning nurseries and the production of nursery stock. This cooperation has been badly needed over the past 28 years in that the only research previously being done was in adjoining states and the findings were not always applicable to the nurseries within the state. Cooperative studies have begun on seedling bed densities,

use of iron oxalate on both the nursery and out-planted seedlings, preliminary arrangements for annual soil testing through the facilities of Clemson College, etc. It is anticipated that after sufficient personnel are available to the research department at Clemson, that many of the other projects which should be investigated will be taken under advisement by the college. Some of the projects established during the fiscal year included studies of seed densities, irrigation versus soil depletion, treatment of red cedar seed, variations using Ferrous and Magnesium Ammonium Phosphate, plant growth regulators, etc.

Anticipated 1961-62 Seedling Production:

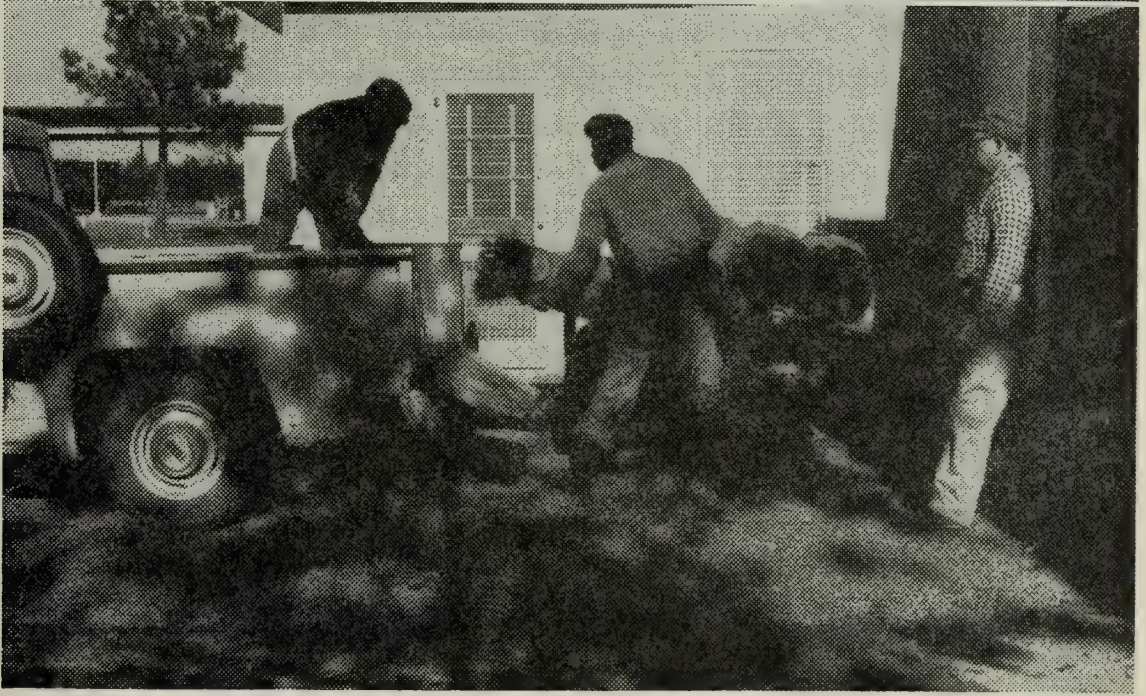
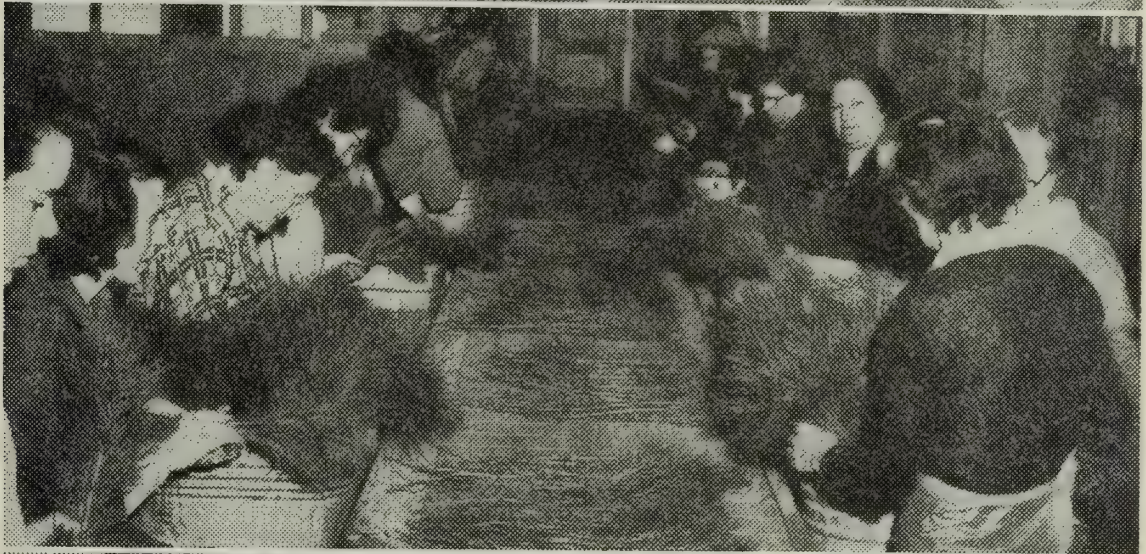
From preliminary inventories of all four nurseries, it is estimated that approximately 130 million seedlings will be available for distribution during the 1961-62 season. No additional seedlings are presently grown for the Commission by TVA nurseries as were previously grown for South Carolina during the height of the Conservation Reserve Program. Species for distribution include loblolly, slash, longleaf, shortleaf, white pine, yellow poplar and red cedar. It appears at the present that all of the backlog requests for seedlings which existed for the past few years will be met during next year's distribution.

NURSERIES

Horace L. Tilghman Forest Tree Nursery:

This was the fourteenth year of tree seedling production at the Tilghman Nursery since acquisition of the 104.5 acres of nursery land in 1946. Approximately 80 acres are available for seedling production. The remaining area is used for roads, buildings, supply storage, and seed extractory. The seed bed area allows for an annual production of 38-40 million trees on a 1-1 rotation. During the 1960-61 fiscal year a total of 50,937,000 seedlings were distributed from the Tilghman Nursery. Actual nursery production amounted to 22,892,500 seedlings.

The general soil type is predominantly a red bay sand loam derived from unconsolidated sands and sandy clays of the coastal plains. Being a coarse sand, the soil is subject to heavy leaching when the soil organic matter is allowed to be depleted; therefore, it is imperative that the seedling crops be produced on a 1-1 rotation to allow for intensive soil building practices during alternate years.



During the year the Forestry Commission's four forest tree nurseries grew, processed, and shipped to South Carolina landowners more than 145 million forest tree seedlings.

Since the nursery was established, 450,937,000 seedlings have been produced and distributed. This represents an annual average of 30,895,570 seedlings. Of this production, 57.9% were slash pine, 39.5% loblolly pine, 1.3% longleaf pine and 1.3% miscellaneous species.

During the year the entire irrigation system was changed from the previously used overhead skinner system to a permanently installed underground system similar to that at the other state nurseries. The old irrigation system had been unsatisfactory since its original installation in that sufficient water could not be delivered during seed germination time when annual winds normally destroy a large percent of the seed by excessive soil covering. The present system has proved entirely satisfactory in that during high windy periods in the spring sufficient moisture could be applied to the straw mulch to prevent the straw from blowing from the seed beds.

Piedmont Forest Tree Nursery:

Land for development of the Piedmont Nursery was acquired in July, 1956, in the northwestern section of Pickens county. A total of 81.5 acres were purchased of which approximately 53 acres are available for tree seedling production. The remaining 28.5 acres constitute roads, stream, buildings and uncultivable land. The soil types range from sandy loam to loamy sand and are principally known as Congaree and Wickham types.

During the past year 14,818,628 seedlings were produced. Since this is the fourth year of production, a grand total of 84,447,784 seedlings have been produced and distributed.

Because the soil types in the nursery are of higher quality than in any of the other nurseries it will be possible to plant part of the area on a 2-1 rotation without seriously depleting soil fertility. During the first three years of operation considerable cost has been borne in weeding the nursery beds. This past year, it was possible to reduce weeding costs by fumigating part of the nursery with Methyl Bromide.

Coastal Forest Tree Nursery:

In July, 1957, the state acquired, under a ten-year lease agreement, 100 acres of nursery land located approximately two miles north of St. George, S. C., along U. S. Highway 15. Approximately 73 acres are available for tree seedling production with the remaining acreage being used for buildings, roads, and un-

cultivable land. Included in the lease agreement is a provision for a right-of-way to a water supply reservoir for irrigation purposes. The nursery improvements, equipment and construction were totally financed through the Soil Bank Conservation Reserve Program so that seedling production could be increased in South Carolina to more nearly meet the demand of the Conservation Reserve Program.

During the year 45,156,300 seedlings were produced. In the three years this nursery has been in production, a grand total of 139,294,930 seedlings have been produced and distributed.

The soil is a Norfolk sandy loam medium phase, which indicates that it will lend itself well to future seedling production and soil building practices. Having a sandy clay subsoil approximately 12 to 14 inches below the topsoil allows for efficient fertilizer absorption together with limited irrigation. As soon as the organic content of the topsoil is raised to a desirable level, parts of this nursery will lend themselves to 2-1 cropping. Over-all annual maintained production should average approximately 40 million trees even though the nursery was over-produced this year.

Since the area is adjacent to a savannah, which is densely populated with various species of oaks, it has been found that *Cronartium fusiforme* rust will be a serious threat to each crop and will require special attention through applications of fungicide sprays during the active season of spores.

A major land leveling process was necessary on approximately 12.4 acres which required considerable dirt movement and a drainage system. With these additional 12.4 acres, however, the total plantable area was brought up to the 73 acres which are available for seedling production.

Ridge Forest Tree Nursery:

During September, 1958, a fourth nursery site was acquired near Trenton, S. C. under a ten-year lease agreement which has a provision that the annual rental payments accrue toward the final purchase price. Purchase can be effected during any period of the ten-year lease or immediately thereafter. Total area includes 110 acres, of which 10 acres are used as a reservoir area. Approximately 75 acres are available for tree seedling production. The two parcels of land (100 acres and 10 acres) are separated by a one-fourth mile right-of-way which is used for the

water main from the reservoir to the nursery site proper. It was necessary to make this division in that water for the reservoir is supplied by a series of springs and contains approximately 67-acre feet of storage water.

The soil types include both medium Norfolk fine sandy loam and deep phase Norfolk fine sandy loam. The small portion that contains the deep phase Norfolk fine sandy loam will require intensive soil management for several years to build up the organic content to a point where leaching is not a serious problem.

This year 52,732,850 seedlings were grown and distributed. Since this is the second year of production, a grand total of 105,141,550 seedlings have been produced by this nursery.

All permanent improvements and nursery layout have been completed during the 1959-60 fiscal year. All these improvements, equipment, etc., were financed through the Conservation Reserve Program.

FOREST FIRE PROTECTION

INTRODUCTION

The Fire Control Branch of the S. C. State Commission of Forestry provides intensive forest fire protection to all private timberland owners in the state. Cooperative fire protection assistance furnished each landowner is based on the theory that the landowner is primarily responsible for the prevention and control of fires on his property, and the Commission of Forestry cooperates with the individual whenever and wherever possible. The state is divided into seven forest service districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district. District headquarters are located at Camden, Florence, Kingstree, Newberry, Orangeburg, Spartanburg, and Walterboro. The districts are sub-divided into county units—all of which have fire control organizations and a limited amount of suppression equipment, thereby enabling them to work directly with private landowners in the prevention and control of fires on private holdings. Numerous landowners throughout the state maintain their own fire suppression hand tools and mechanized equipment with sufficient personnel to adequately handle wild fires on their property. The total state and private forest area in South Carolina comprises some 11,175,000 acres. In addition to the above total, the U. S. Forest Service protects 587,221 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

County Units:

Each county unit organization consists of a unit ranger, wardens, lookout towermen, and tractor operators. The number of wardens, towermen, and tractor operators in each county varies according to the size and forest acreage of the county and in some cases with particular problems which may exist. The total county unit personnel in South Carolina consists of 46 rangers, 134 wardens, 68 tractor operators, and 138 lookout towermen.

Country Forestry Boards:

The State Forest Fire Protection Act of 1945 provided for a county forestry board consisting of five members to be appointed by the Commission of Forestry upon the recommendation of the majority of the County Legislative Delegation. The individuals

who serve on the forestry boards in each county are appointed for a five-year term. An annual meeting is held each year to discuss and review forest fire protection activities within the county. All board members are kept informed of the various activities of the Commission of Forestry and are contacted periodically in connection with the work program. Many of the accomplishments in forest fire control are attributed directly to the efforts and support of the individual board members throughout the state.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards is composed of one delegate from each county board elected by the membership of the board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities, including forest fire control, forest management, reforestation, and information and education. The committee meets annually to discuss the proposed forestry program for the coming fiscal year and also considers the budget request which is submitted to the State Legislature. Individual committee members are responsible for familiarizing themselves with local forestry conditions and activities within their counties and making recommendations to the Commission of Forestry in an endeavor to further the over-all forestry program in South Carolina.

State Forests and Parks:

The 25 state parks and 4 state forests in South Carolina comprise approximately 169,574 acres. The individual park superintendents and state forest directors are responsible for the protection of timberland areas within their boundaries on a cooperative basis with the Branch of Forest Fire Control. Fire plans, which include recommendations for the adequate protection of these state-owned areas, have been prepared and furnished each superintendent.

Cooperative Agreement With U. S. Forest Service:

The Commission of Forestry and the U. S. Forest Service maintain a formal agreement to assist one another with the detection and suppression of fires which occur along the immediate vicinity of the national forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

The many varied fire control activities require a continuous training program in order to get the fire control job accomplished efficiently and economically. Training fire control personnel is considered to be one of the most important phases of the fire control program. Special emphasis is given throughout the year to conducting training on a local basis, tailoring the training for the individual and the job he is held responsible for. Normally, this training is conducted on the job by the individual's immediate supervisor.

Training other than individual training is given periodically to special groups of fire control personnel covering specific topics such as law enforcement, fire damage appraisal, and large fire organization. For example, two on-the-ground large fire organizational training meetings were held simulating an actual fire of some eight to ten thousand acres. These schools were held primarily for the purpose of training personnel for overhead positions in a large fire organization.

Inspection:

Complete unit inspections are conducted in each county in an endeavor to discover deficiencies in the fire control organization. These inspections cover all phases of the fire control activities in a county unit and are normally conducted at least every two years in all counties.

The fire control fleet of mechanical equipment requires constant attention and special emphasis is placed on preventive maintenance in order to keep all the equipment operating efficiently and with a minimum of operating costs. Periodic motor vehicle inspections are made by the traveling mechanics and the district heavy suppression unit operating mechanics in an endeavor to carry out the fire control preventive maintenance program.

Fire Control Progress Checks:

Periodic fire control progress checks are conducted in each district of the state by the central fire control staff to determine the efficiency and effectiveness of the entire fire protection program. All phases of the work are analyzed and reviewed with the district office staff in an endeavor to maintain a high degree of performance in this activity.

Law Enforcement:

The commission continued to intensify the fire law enforcement program in an endeavor to reduce fire occurrences. Cooperation from the State Law Enforcement Division and local law enforcement agencies contributed materially to an effective law enforcement program during the year.

There were a total of 244 prosecutions and 235 convictions obtained for violators of the various forest fire laws for the fiscal year. Of this number, 26 of the prosecutions and 26 of the convictions were for the violation of the burning permit and/or notification laws; 206 prosecutions and 198 convictions were for violations of the careless and negligent law; and 12 of the prosecutions and 11 convictions were for the violation of the wilfull and malicious law.

The main causes of forest fires were smokers 1,568 fires, careless brush and debris burning 1,351 fires, and incendiary or deliberate burning 1,136 fires. These three causes accounted for 4,055 fires of the total 4,776 fires that burned during the year.

The burning notification law was enacted in Chesterfield County bringing the total to 14 counties now having a burning notification or permit law. Counties with the permit law statutes are Chesterfield, Aiken, Orangeburg, Georgetown, Charleston, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Counties with notification laws include Beaufort, Colleton, Hampton, and Jasper.

Fire Plans:

All county unit organizations are furnished a detailed forest fire control plan which outlines procedures for the control and operation of fire suppression activities. The plans are kept revised to conform with current conditions and operating procedures.

In addition to the unit plans furnished each county organization, a number of similar plans have been prepared for various landowners throughout the State in a desire to maintain adequate fire protection on their timberland holdings.

Forestry Legislation:

During the 1961 session of the General Assembly, the Chesterfield County Delegation introduced and was successful in enacting a burning permit law similar to the laws already in effect in ten other counties of the state.

The General Assembly also extended the Legislative Forestry Study Committee for the fiscal year 1961-62.

Legislative Forestry Study Committee:

The 1955 session of the General Assembly provided for the appointment of a legislative forestry study committee which has been continued through the years. This committee, which originally was designed to study forest fire conditions in the state, has been expanded to cover the entire field of forestry. Each year, the committee schedules a series of meetings and hearings and formulates many recommendations which are consolidated in an annual report to the General Assembly.

Southern States Forest Fire Control Conference:

The twenty-second Southern States Forest Fire Control Conference was held in Oklahoma City, Oklahoma, in May of 1961. These annual meetings are designed to promote the efficiency of forest fire control efforts in fire protection work.

Southeastern States Forest Fire Compact Commission:

The ten Southeastern States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia make up the Southeastern States Forest Fire Compact Commission.

The membership of this Commission from each state is com-



The South Carolina Legislative Forestry Study Committee inspects a heavy crawler tractor equipped with a root rake used in clearing scrub oak before pine plantations can be established successfully.

prised of a Compact Administrator (the State Forester) and a four-member advisory committee. The South Carolina membership includes Senator L. Marion Gressette of Calhoun County, Representative Charles G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County and R. R. Rigby of Columbia.

The governing body of the Compact Commission is a five-man executive committee headed by a chairman. The chairman is selected by the Commission at its annual meeting.

A two-day training school was held in Fayetteville, N. C. for members of the fire organizations from the Compact States. The training was conducted by members of the Regional Office of the U. S. Forest Fire Service and members from fire control divisions of the Compact States.

Civil Defense:

The Commission of Forestry cooperates with State Civil Defense in relaying messages to and from State Civil Defense Headquarters and local civil defense chairmen. This cooperative assistance is rendered during any emergency or disaster which may hit the state, as well as participating in civil defense alerts which may be scheduled from time to time. All messages are relayed over the Commission's two-way radio network by members of the central fire control office, district offices, and county radio facilities.

IMPROVEMENTS, TOOLS AND EQUIPMENT

Lookout Towers:

The Commission of Forestry operates 138 forest fire lookout towers in the state. In addition to the state-operated towers, the U. S. Forest Service owns and operates a number of lookout units on the Sumter and Francis Marion National Forests. All towermen, both state and federal, cooperate in spotting and locating fires which occur within their visual range.

Tower Unit Buildings:

During the year, the residences located at the lookout towers were equipped with indoor sanitary facilities. Other routine maintenance was also carried out.

ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

135 Lookout Tower Units	\$2,947,503
46 Fire Danger Measurement Stations	3,450
250 Miles Telephone Line	75,000
Central Radio Shop and Map Laboratory	25,000
Central Repair Shop and Warehouse System	286,480
6 District Repair Shops	30,000

Radio:

7 Remote Control Base Sta- tions, 60 watt	@	\$1,200	\$	8,400
2 Remote Control Base Sta- tions, 60 watt	@	1,800		3,600
1 Remote Control Base Sta- tion, 250 watt	@	3,600		3,600
1 Remote Control Base Sta- tion, 100 watt	@	2,000		2,000
26 Base Station Units, 50 watt @		900		23,400
155 Base Station Units, 10, 25, and 30 watt	@	535		82,925
250 Mobile Units (Single Chan- nel) in Trucks and Cars ...	@	550		137,500
46 Mobile Units on Tractors @		650		29,900
6 Mobile Units (Dual Chan- nel)	@	625		3,750
5 Portable Units	@	400		2,000
35 Special Radio Control Units for Wardens	@	135		4,725
90 Auxiliary Receivers (in War- dens' Homes)	@	250		22,500
				324,300
TOTAL				\$3,691,733

Equipment:

During the fiscal year, no additional fire suppression units were purchased. Ten new ranger pickup trucks were purchased as replacements for old worn-out units. Six light tractor sup-

pression units were replaced with new crawler-type tractors and new trucks during the year. One station wagon was replaced with a new vehicle for use by a traveling mechanic. One sedan was replaced for use by the Communications Engineer.

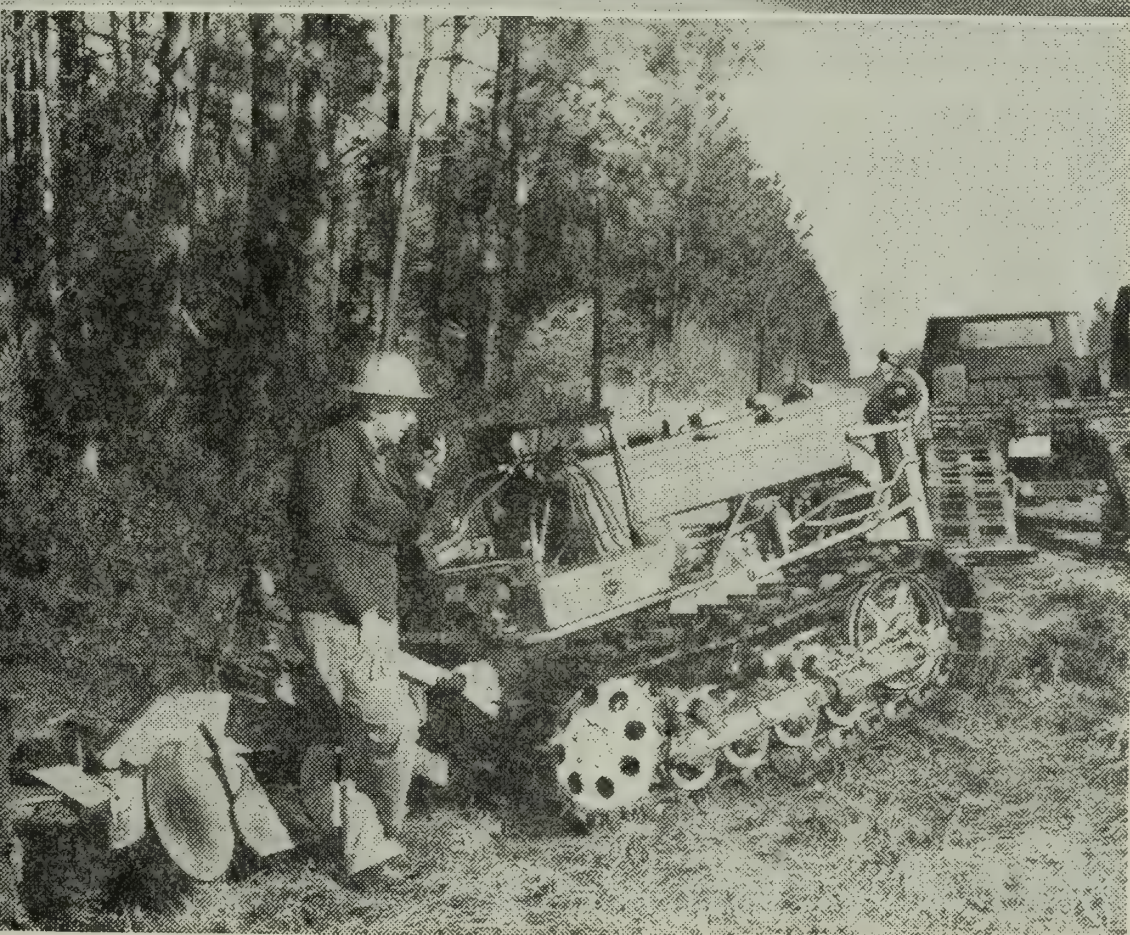
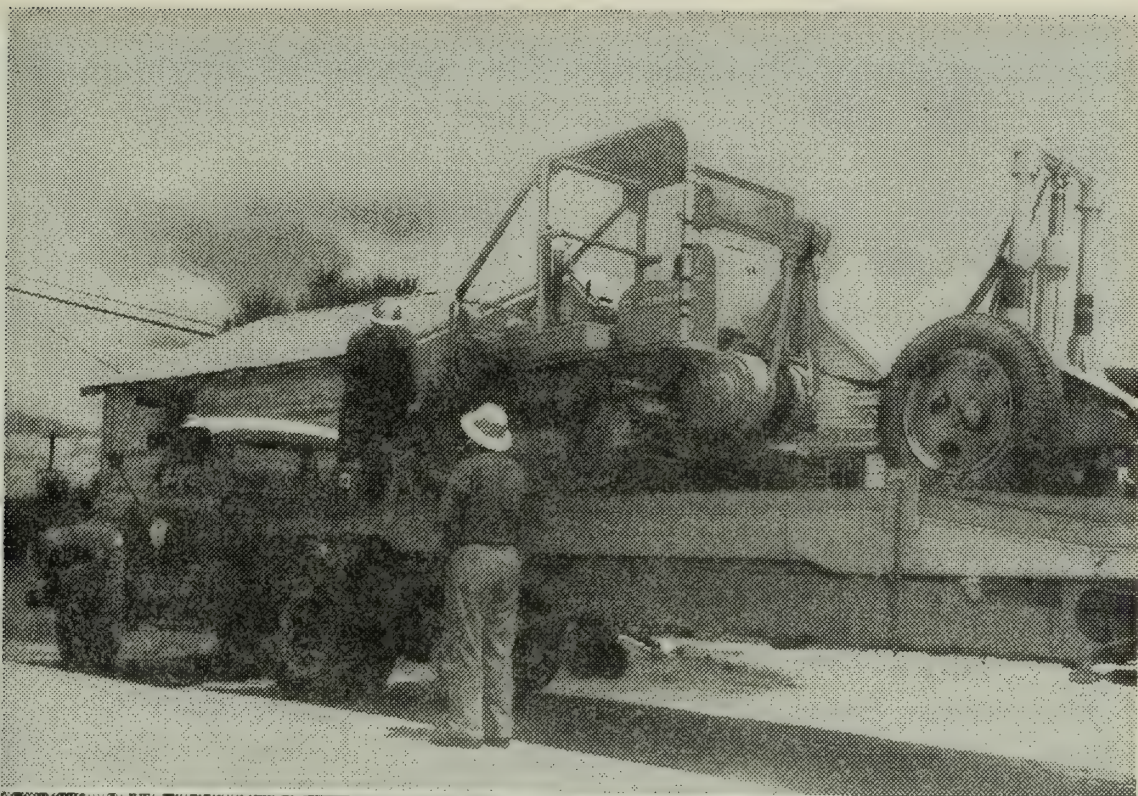
INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1961

2,156	Back Pack Pumps	\$ 35,980
5,014	Fire Rakes	17,220
2,669	Fire Swatters	10,656
373	Backfire Torches	7,600
10	Heavy Suppression Tractor-Plow Units w/Transports	228,000
3	Heavy Dozers	80,000
1	Medium Suppression Tractor-Plow Unit w/Transport	20,800
69	Light Tractor-Plow Units w/Transports	520,950
1	Heavy Lowboy Truck-Transport	10,000
45	Ranger Pickup Trucks	78,750
1	1/4-Ton Jeep	2,250
7	Sedan Delivery Trucks	14,000
3	2-Ton Stake Body Trucks	7,650
16	1/2-Ton Pickup Trucks	28,000
1	Mobile Field Headquarters Unit	3,200
1	Field Kitchen w/Power Supply Trailer & Water Truck	14,000
1	Supply Van	2,500
TOTAL		\$1,081,556

Equipment Maintenance Shop:

The Fire Control Branch operates a Central Repair Shop at Sumter where heavy and specialized repairs are made to all fire control equipment. Three traveling mechanics, headquartering at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator and the district mechanic, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 1,074 complete field inspections of equipment and conducted 1,367 field repair jobs.



Fourteen Heavy, or Medium Suppression Tractor Units with fire plow or dozer and sixty-nine Light Tractor Plow Units stand ready in every section of the state to assist landowners suppress woods fires when hand tools and local efforts prove inadequate in controlling a blaze.

The Central Shop personnel at Sumter made many repairs to automotive equipment owned by the Commission and manufactured many items necessary for field use. Some of the work handled by the mechanical force is listed below.

Major repairs were made to 47 light tractors, 9 heavy tractors, 66 light trucks, 54 heavy trucks, 6 light plows, 1 heavy plow, 1 light trailer, and 4 heavy trailers. Minor repairs were made to 3 light tractors, 42 light trucks, and 8 heavy trucks.

In addition to repair work, many items were manufactured at the Central Shop. Work done included modifying or building equipment bodies, making booster tanks, radio boxes, and equipment racks. Repairing and putting into service surplus equipment is also done at the Central Repair Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. These facilities are used for warehousing certain materials and supplies necessary for the efficient operation of each of the forestry districts and by the mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district. The traveling mechanics who operate from the Central Repair Shop at Sumter also use the shops in assisting the local mechanics to more effectively keep all motorized equipment in good operating condition at all times and to make any necessary repairs which may be needed locally.

Columbia Radio Repair Shop:

During the summer and fall of 1958, a new central radio communications maintenance and repair shop was erected at 241 Catawba Avenue in Columbia. This building is being used as a central headquarters for all radio communications installations, maintenance, and repairs for the entire state. This central radio shop coordinates the activities of all district radio technicians who are assigned to district repair shops in the various forest service districts.

Fire Control Maps:

A new map laboratory was installed in one section of the central radio repair shop during fiscal year 1958-59. This laboratory, complete with drafting room and map making equipment

and facilities, is being used to manufacture all forest fire control maps which are needed by district and county unit personnel in carrying out fire protection activities within the state.

Radio:

It has been recognized during the past several years that the traffic build-up on the primary fire channel of 159.27 Mc. was decreasing the efficiency of the radio communications system. A plan was put into operation to obtain several additional radio channels and stagger these channels among the seven districts to minimize interference. Conversion kits, crystals, and other parts were obtained, and the project of converting to dual channel all radio units in Orangeburg and Florence Districts is now in progress.

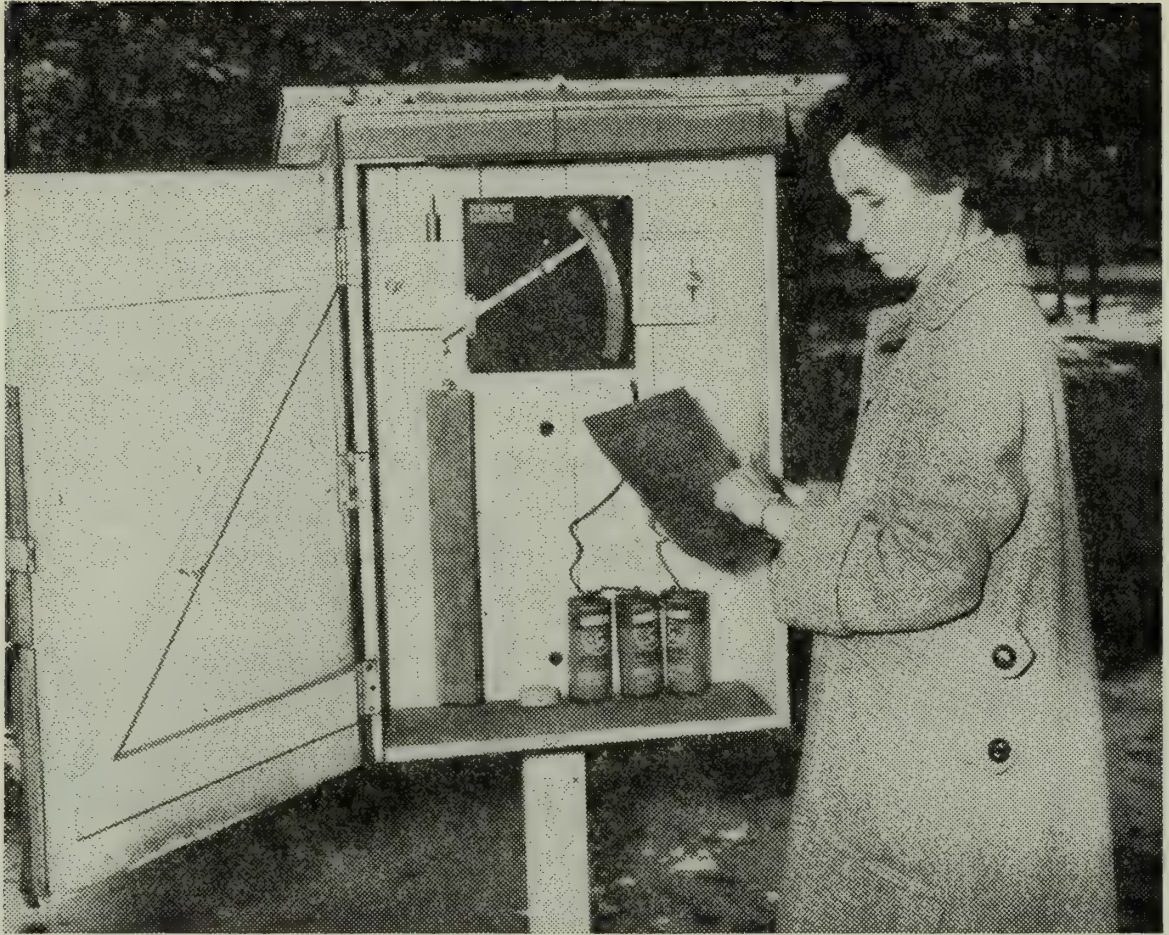
Authorization was granted to employ an additional district radio technician to be located in Florence. This will reduce the over-all load on the present five technicians and permit a more intensive preventive maintenance program on all radio units.

Use of Aircraft in Fire Control:

Radio-equipped planes are used on a contract basis when necessary to supplement the lookout towers. During periods of low visibility, towers cannot adequately cover their area of responsibility and, without the use of airplanes, many fires would occur and burn for a long period of time undetected before they are accidentally discovered and reported to the fire control organization. Whenever large fires occur, planes are also used to direct the actions of the ground suppression forces. During periods of high fire occurrence, air observers direct fire suppression personnel to those fires which need greatest attention and assist them in organizing their plans of attack.

Fire Danger Measurement:

Fire danger measurement stations are located in each county of the state. Readings are taken at these stations twice daily and the information disseminated to all fire control personnel to keep them informed of current degrees of fire danger. Fire control personnel use this information to determine the probability of fire occurrence and also the expected rate of spread in the event fires occur. Accordingly, personnel are better able to plan their daily work activities and when necessary, make themselves available for immediate fire call. Class fire days are rated from



A fire danger measurement station in every county provides valuable fire danger information which enables personnel to better plan their daily activities and when necessary, make themselves available for immediate fire call.

1 to 5, with 1 the lowest and 5 representing the highest degree of fire danger. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the 5 major ratings: 208 Class No. 1 days; 98 Class No. 2 days; 46 Class No. 3 days; 12 Class No. 4 days; and 1 Class No. 5 day.

Legal Fires:

Legal fires are all forest fires which are previously authorized by the landowner and started by him or his authorized agent and which burn entirely upon his land. A total of 3,321 fires which burned 204,573.2 acres were conducted by individual landowners during the year and recorded by county unit personnel. 415 fires burning some 79,083 acres were conducted for hazard reduction purposes, 876 fires which burned 100,011 acres were handled on hunting preserves for the purpose of improving woodland conditions for hunting and the management of game. Burnings conducted to rid timber areas of accumulated debris and rubbish accounted for 1,056 fires which burned 4,108 acres.

Burning of timberland areas for grazing purposes accounted for 233 fires which burned 10,781 acres. 741 fires burning 10,591 acres were conducted for miscellaneous purposes such as the destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

The 4,776 forest fires which burned in South Carolina during the past fiscal year represent the highest rate of fire occurrence since fiscal year 1954-55 when 7,022 fires were recorded. The 59,969.8 acres burned during the year was the highest total area burned since fiscal year 1955-56 when 76,743.5 acres were recorded. The 1960-61 fire season represented 1,818 more fires and 30,184 more acres than burned during the previous calendar year. 80.8% of all the fires occurred during the months of December, January, February, and March of this fiscal year. The total acreage burned by all fires represents 0.54% of the total forest area under protection. The average area burned per fire was 12.6 acres.

During the fiscal year, counties which experienced a high rate of fire occurrence and acreage burned were Berkeley with 338 fires burning 5,209.8 acres; Clarendon with 263 fires burning 4,529.5 acres; Florence, 255 fires burning 2,474.0 acres; Horry, 202 fires burning 2,918.5 acres; Orangeburg with 340 fires burning 7,708.8 acres; and Williamsburg with 388 fires burning 9,140.8 acres. Those counties suffering acreage burns which exceeded 1% of the total forest area under protection in that county were Berkeley with 1.31% ; Clarendon, 1.98% ; Marlboro, 1.25% ; Orangeburg, 2.42% ; Sumter, 1.07% ; and Williamsburg, 2.13%.

Counties which recorded average area burned per fire figures which were comparatively high were: Bamberg with 18.7 acres per fire; Berkeley, 15.4 acres; Clarendon, 17.2 acres; Jasper, 17.8 acres; Orangeburg, 22.7 acres; and Williamsburg, 23.6 acres.

Counties which experienced relatively low fire occurrence and acreage burned were: Abbeville with 26 fires burning 121.9 acres; Greenwood, 27 fires burning 70.3 acres; Pickens, 27 fires burning 107.2 acres; Calhoun, 18 fires burning 111.6 acres; Cherokee, 22 fires burning 128.1 acres; Edgefield, 25 fires burning 101.5 acres; McCormick, 13 fires burning 100.4 acres; Newberry, 17 fires burning 25.6 acres; and Saluda, 16 fires burning 28.9

acres. It is noteworthy to mention that during the fiscal year, Newberry County recorded only 25.6 acres burned by wild fires, followed closely by Saluda which recorded 28.9 acres. Those counties which experienced acreage burned figures of 0.05%, or less, of the total forest area in the county were: Greenwood, 0.04% ; Newberry, 0.01% ; Oconee, 0.05% ; and Saluda, 0.02%. Counties experiencing low average area burned per fire were Abbeville, 4.7 acres per fire; Anderson, 3.7 acres; Edgefield, 4.1 acres; Greenville, 2.2 acres; Greenwood, 2.6 acres; Laurens, 4.2 acres; Lexington, 3.1 acres; Marion, 3.0 acres; Newberry, 1.5 acres; Oconee, 2.8 acres; Pickens, 4.0 acres; Saluda, 1.8 acres; and Union, 4.9 acres.

Smokers continued as the major cause of forest fires in South Carolina again this year. Some 1,568 fires or 32.8% of the total number which occurred were attributed to this factor. Debris burning followed a close second with 1,351 fires or 28.3% of the total. Incendiarism accounted for 1,136 fires or 23.8% of the total.

Recorded precipitation in South Carolina during fiscal year 1960-61 was approximately 10 inches less than the previous fiscal year. The 55 inches of rainfall which was recorded at the 46 fire danger measurement stations in the state represents a departure from normal of 6.17 inches above the long-time average. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

Month	Amount Rainfall (Inches)	Departure from Normal (Inches)
July, 1960	8.22	+ 2.45
August, 1960	4.07	— 1.59
September, 1960	5.16	+ 1.13
October, 1960	2.65	— 0.16
November, 1960	1.30	— 1.61
December, 1960	2.43	— 1.74
January, 1961	2.81	— 0.96
February, 1961	6.69	+ 2.88
March, 1961	5.04	+ 0.50
April, 1961	6.74	+ 2.97
May, 1961	4.40	+ 0.92
June, 1961	5.49	+ 1.38
TOTAL	55.00	+ 6.17

A five-year summary of precipitation by fiscal years is shown below:

Year	Amount Rainfall (Inches)	Departure from Normal (Inches)
1956-57 -----	43.15	— 4.02
1957-58 -----	55.18	+ 7.93
1958-59 -----	47.03	— 1.80
1959-60 -----	64.29	+15.46
1960-61 -----	55.00	+ 6.17
Average -----	52.93	

INFORMATION AND EDUCATION

INTRODUCTION

There are five acres of forest land in South Carolina for every man, woman and child or a value of nearly \$500 each year to each family in South Carolina. This adds up to nearly 12 million acres of forest land and an annual return of \$370,000,000 in manufacture and sale of forest products. The importance of this forest land and the industry it supports to the progress of the economy and well-being of the people of our state should be obvious.

There is growing need for stepped-up activities in forest conservation and development to make each acre of forest land produce the maximum amount of wood fiber, as well as provide the necessary recreation facilities to our ever-increasing population. The part that our woodlands play in the supply of good and plentiful water for both home and industrial use is also becoming increasingly important.

A good, sound forest conservation program involves not only trees but people as well. The success of the Commission's forest conservation activities depends upon an adequately informed public, and involves many people and many different activities.

The Commission functions on the premise that every member of its organization has a part in the educational program. Personnel of the Commission reach out in the educational program through press releases, photographs, pamphlets, talks, field demonstrations, films, radio and television programs. Through these media South Carolinians are made aware of the seriousness of the problems that face our state in the maintenance of our state parks that serve millions every year, and the conservation of our natural resources that make possible a livelihood for many and comforts and necessities for all.

The Commission's educational program is geared to point out that every South Carolinian has a stake and a responsibility not only in the present but also in the future of the state parks and forests of South Carolina. It is a fact that the forests of South Carolina support the state's second largest industry, second only to textiles. It is also a fact, though, that the state's woodlands are producing at less than half of their potential capacity. When the landowners and people of our state realize the potential

value of woodland production and apply practical methods of conservation and wise use, the amount of timber available for commercial use can be more than doubled.

The problems of forest conservation and stepped-up production of forest products can be solved through a three-fold program. The first step is the prevention of wild woods fires. The second is an improvement of forest cutting and management practices. And the third is restocking idle agricultural land as well as understocked and idle woodland.

The aim of the Commission's information and education program is to get forestry and state park information to the people of South Carolina so that the problems confronting us may be solved. Information and education efforts are keyed to the following points:

1. Forest Fire Protection

More than 3,700 illegal woods fires occur annually in South Carolina, with 99 per cent being caused by people.

2. Unwise cutting practices mean low production and inferior forest products.
3. Trees should be planted on more than five million acres of idle or unproductive land.
4. Improvement of the quality of many existing stands of timber throughout the state by the removal of inferior species as well as low grade and poor-quality trees.
5. Full appreciation should be developed in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of South Carolina.

FOREST FIRE PREVENTION

A realistic localized approach to teaching forest fire prevention is used by all personnel of the State Commission of Forestry. Particular emphasis is given the damage caused by the average slow-burning quiet fire that so many South Carolinians are accustomed to seeing, with the spotlight on the loss of little trees as these fires sweep through our woodlands. Attention is drawn to the protection of little trees as the key to adequate stocking of our woodlands in the future.

Emphasis by the Commission of Forestry on the little tree as basic to an understanding of what is lost in a forest fire, began

in 1950. A number of posters, pictures and other items highlighting the little tree have been developed and used.

A serious effort is made to reach every man, woman, and child possible within the state of South Carolina through personal contacts; posters and publications available through the national Cooperative Forest Fire Prevention Campaign and the Southern Cooperative Forest Fire Prevention Campaign; and illustrated talks and motion picture showings in community meetings, in private homes, civic club meetings, and school rooms. Wall and pocket calendars, roadside signs and exhibits, and other materials produced by the Commission, broaden the means of bringing the conservation message to each and every citizen in the state. Considerable credit is due also to other interested agencies, both private and governmental, for their cooperation in assisting the program of education of the Commission of Forestry.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The message of the Cooperative Forest Fire Prevention Campaign, with the support of the Commission of Forestry and media of public information reaches in one way or another nearly every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, book-marks, newspaper ads, radio platters, TV spots, films, and other materials to bring forest fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flashlights, wallets and moccasins, T-shirts, scarfs, fish-

WHY?



remember—
only you can **PREVENT FOREST FIRES!**

U.S. Department of Agriculture
Forest Service

State Forestry Department

A strong reminder of the cost of carelessness.

ing tackle and archery sets, cigarette snuffers and ashtrays, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, banks, coloring books, comic books, story books, bubble bath, buttons, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls, and many other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Feeling the need for a more local slant than some of the published materials in the national campaign can provide, the states and the U. S. Forest Service in the Southern region have continued to cooperate in the production of forest fire prevention materials with a Southern flavor. State Forester Flory is a member of the committee guiding the development of this program. The third year's operation of the Southern program saw continued production of recorded radio spots, a series of TV spots, films, news ads, and a poster, all of which are currently being distributed. The Southern materials do not replace, but will supplement the national materials to intensify and strengthen forest fire prevention efforts in South Carolina.

The Southern CFFP program is not a cure-all for the forest fire problem in the South. However, it can be mighty potent and effective medicine, particularly as it is coordinated and supported by the national Smokey Bear program, and the special fire prevention programs at the state, county, and local levels.

FOREST FIRE RECORD

The branch of Information and Education continued to keep the press and public informed accurately as to the forest fire situation throughout the state, stressing the need for particular care during the critical dry and windy months of January, February, March, and April. This information is made available by articles and photographs for newspapers, and motion picture footage for television use, for example.

The continuing occurrence of intentionally set fires during the year pointed up the urgent need for an intensified program of child and adult education as well as the need for a strengthened law enforcement program.

SCHOOL PROGRAMS

School children throughout the state received basic information on forestry and forest fire prevention from foresters, rangers, and wardens of the Commission of Forestry. Some 790 programs were held in the fifth and sixth grades where either schoolyard demonstrations of fire control equipment and suppression techniques, or color slides were shown to help bring the conservation story to the classroom. In these two grades alone, 37,593 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slides programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations mentioned above, all third grade children throughout the state (more than 70,000) received a copy of the booklet "Smokey Bear's Story of the Forest." An equal number of second grade students received coloring sheets with forest fire prevention and conservation messages. Sixty-five thousand fourth graders received a color comic book entitled "The True Story of Smokey the Bear."

A color sheet with a forest fire prevention message was also given to each second grade student.

Some 310 movie showings were made in schools bringing forest conservation information to 53,036 students of all grade levels.

The Commission's school programs are designed to build a stronger and more appreciative community of the future by giving basic instruction and information to children on the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

FORESTRY DEMONSTRATIONS

During the year 4,622 persons attended 189 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species and timber stand improvement.

Demonstrations are effective ways of getting forestry information to people and can do much to help make it possible to grow an appreciably greater amount of valuable timber on the 12 million acres of forest land in the state.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson College Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies and organizations cooperated to make the observance of 1960 Arbor Day and Conservation Week a success. South Carolina law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 55,000 copies of a special folder were printed and distributed to schools and other interested groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs include tree planting exercises.

A total of 438 Conservation Week and Arbor Day programs were reported, with 67,202 persons attending.

FIRE PREVENTION ROADSIDE SIGNS

New roadside signs were erected wherever older signs needed replacement. The signs continued to carry the three messages in the following sequence: **USE YOUR ASH TRAY—HELP PREVENT WOODS FIRES—PROTECT LITTLE TREES, KEEP S. C. GREEN.** First erected in February 1953, the fire prevention roadside signs appear on main highways throughout the state. The Commission hopes to be able to intensify this project from year to year by providing additional signs along intermediate highways where thousands of motorists will see these forest fire prevention reminders as they travel the highways.

MOTION PICTURES

Motion pictures are a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office

is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 60,582 people saw motion pictures on forestry at 481 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

Since 1930, when forestry was added as a course of study in vocational agriculture classes in South Carolina, the Vocational Agriculture staff of the State Department of Education and the State Commission of Forestry have worked very closely in emphasizing the importance of the conservation of our forest resources to the future farmers of the state.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many students have home forestry projects. They plow firebreaks, plant seedlings, thin crowded stands, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes. Commission Foresters and Rangers are available to assist vocational agriculture classes with talks, demonstrations, and field work on forestry, and also provide filmstrips, motion picture films, booklets, posters, and other aids for teaching forestry.

The Forestry Commission sponsors an annual FFA and NFA

Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1960-61 school year awards were presented to the winning FFA and NFA Chapters in each Vocational Agriculture District as follows:

DISTRICT I—FFA

- (1) Wren FFA Chapter
- (2) Pendleton FFA Chapter

DISTRICT II—FFA

- (1) Rock Hill FFA Chapter
- (2) Winnsboro FFA Chapter

DISTRICT III—FFA

- (1) Gilbert FFA Chapter
- (2) Dentsville FFA Chapter

DISTRICT IV—FFA

- (1) Allendale-Fairfax Chapter
- (2) Ridgeland FFA Chapter

DISTRICT V—FFA

- (1) Hannah FFA Chapter
- (2) St. Johns FFA Chapter

DISTRICT VI—FFA

- (1) Conway FFA Chapter
- (2) St. Stephen FFA Chapter

DISTRICT III—NFA

- (1) Edgefield County Training High School NFA Chapter

DISTRICT IV—NFA

- (1) Lewis L. Butler High School NFA Chapter

RESOURCE-USE EDUCATION

To stimulate the teaching of conservation at various grade levels in the schools of the state two workshops were held for elementary and high school teachers during the year. Commission personnel provided instruction in forestry and the use of state park facilities in resource-use education workshops held at the University of South Carolina and at Clemson College.

In addition to the workshops mentioned above, forestry and state park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation. Particular emphasis was again placed on state park trails as effective "outdoor classrooms" for studying the

many interrelated factors that go to make a good conservation education program.

An entire sixth grade class was taken the latter part of April, 1961, on a two-day trip to Table Rock State Park. Mrs. Mary Mace, teacher of a sixth grade class of Brennan School in Columbia, with the help of the children's parents worked out details of the trip as a climax to several weeks of classroom work on conservation projects. Foresters of the Commission of Forestry accompanied the class, serving as advisors in plans and as instructors in outdoor classes.

The resource-use education movement has stimulated interest in the out-of-doors as an aid to effective teaching, and provides an excellent opportunity for teaching conservation concepts.

The S. C. State Commission of Forestry continued its cooperation with the South Carolina Advisory Council on Conservation Education, composed of representatives of conservation agencies and groups, State Department of Education, teachers and others. Each conservation group or agency submitted a report on its present conservation activities and materials distribution. A committee was appointed to formulate guidelines for a bibliography of materials and personnel available to teachers. This will be issued in book form with each item classified according to subject and grade level.

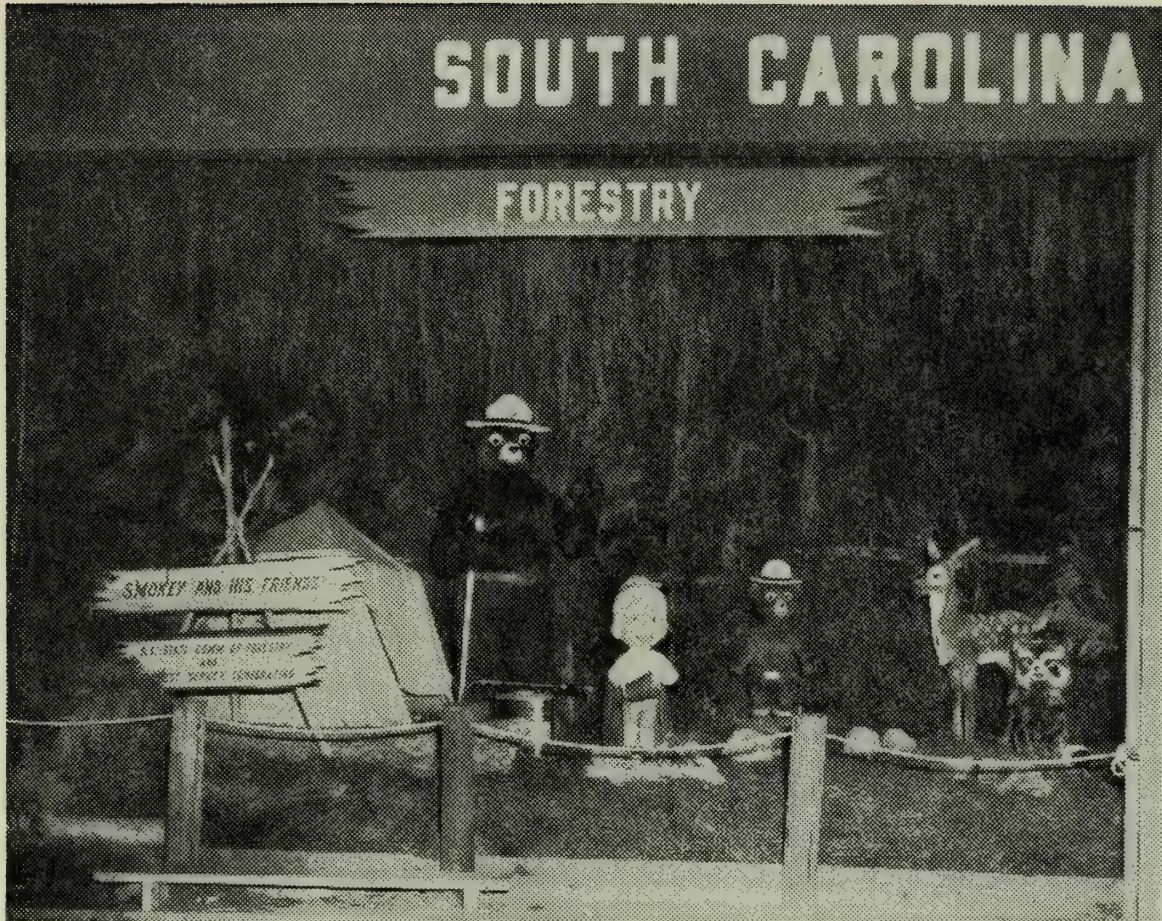
The Council will send one bibliography to each school library and local committees will be set up to promote use of the materials described.

TALKS

Personnel of the State Commission of Forestry give talks in all phases of forestry and state parks before many groups. The use of color slides with many of the talks help make them much more interesting and more effective.

During the year a total of 291 talks were made by Commission personnel to 14,490 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. Foresters, Park Superintendents, Rangers, Wardens, Tractor Operators, Tower Operators, and other Commission



A fully animated and talking Smokey and His Friends was a real feature at the 1960 State Fair. This exhibit, constructed by the Forest Service, U. S. Department of Agriculture, is part of the Cooperative Forest Fire Prevention Campaign and has been used in fairs and expositions all over the United States.

personnel play an important part in the Commission's information and education program. As one example of the number of people reached, during the past year 17,140 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting, and preventing fires was usually explained or demonstrated.

EXHIBITS

The Forestry Commission welcomes the opportunity to place exhibits in fairs and other places where educational forestry and state park displays are requested. Exhibits provide an excellent means of placing forestry and state park information before the people.

During the year the Commission cooperated with the Forestry Committee of the State Bankers Association and with International Paper Company, West Virginia Pulp and Paper Company, and Union Bag-Camp Paper Corporation in placing exhibits in interested banks throughout South Carolina.

Throughout South Carolina personnel of the Commission of Forestry placed exhibits at 84 locations which were seen by an estimated 1,063,798 citizens of the state.

The following is a record of where forestry and state park exhibits were displayed:

Exhibits at State and County Fairs

Location of Exhibit—County Fair	Type of Exhibit	Estimated Attendance
McCormick	Commercial Woods of S. C.....	4,700
Chester	Commercial Woods of S. C.....	7,000
Chesterfield	Commercial Woods of S. C.....	7,000
Pickens	Commercial Woods of S. C.....	20,000
Abbeville	Commercial Woods of S. C.....	6,000
Greenville	Commercial Woods of S. C.....	36,000
Dillon	Gum Cross Section.....	5,000
Florence	Smokey the Magician.....	30,000
Orangeburg	Common Woods of S. C.....	15,000
Greenwood	Commercial Woods of S. C. and Management....	45,500
Newberry	Commercial Woods and Management Translite....	21,000
Sumter	Smokey the Magician.....	30,000
Spartanburg	Judge Smokey Diorama and Commercial Woods of S. C.....	100,000
Anderson	Commercial Woods of S. C.....	60,000
Chester (N)	Commercial Woods of S. C.....	2,500
Berkeley	Judge Smokey Diorama.....	7,500
Anderson (N)	Commercial Woods of S. C.....	30,000
Union	Common Woods of S. C.....	30,000
Lancaster	Smokey the Magician.....	12,000
Lee	Commercial Woods of S. C.....	9,000
Kershaw	Smokey the Magician.....	12,000
Beaufort	Commercial Woods of S. C.....	10,000
Charleston	Judge Smokey Diorama.....	35,000
Charleston (N)	Judge Smokey Diorama.....	12,000
Laurens	Fire Control	24,800
Marion	Gum Cross Section.....	2,000
		574,000
State Fairs		
Columbia	Smokey and Friends.....	150,000
Columbia (N)	Smokey and Friends.....	95,000
		245,000

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

Bennettsville (Marlboro Electric Coop)—Commercial Woods of S. C.....	5,000
Conway (Horry Electric Coop)—Commercial Woods of S. C.....	8,000
Marion (Marion Electric Coop)—Commercial Woods of S. C.....	6,000
Darlington (Pee Dee Electric Coop)—Wood Panel.....	2,000
St. Matthews (REA Fair)—Forest Management.....	3,000
Manning (Jaycees—Farmer's Fall Fun Festival)—Fire Prevention.....	1,000
Dillon (Semi-Centennial)—Fire Prevention.....	5,000
Bennettsville (Merchants Association)—Commercial Woods of S. C.....	3,000
Sumter (Garden Club Flower Show)—Smokey's Commandments.....	1,000
Camden (Chamber of Commerce Ind. Fair)—Forest Values of Kershaw County.....	20,000
Aiken (Garden Club)—Fire Control.....	200
Columbia (Arden School)—Common Woods of S. C.....	500
Greenville (Carolina Lumber & Building Supply Assn.)—Commercial Woods of S. C...	1,998
Columbia (John P. Thomas School)—Common Woods & Gum Cross Section.....	300
Barnwell (REA Fair)—Insect Display.....	2,500
Rock Hill (Nature Museum)—Forest Management.....	600
Hampton (Watermelon Festival)—Fire Prevention.....	10,000
Lexington (Fire Prevention Parade)—Smokey on Tractor.....	3,000
Camden (Fire Prevention Parade)—Smokey on Tractor.....	5,000
Florence (Fire Prevention Parade)—Smokey on Tractor.....	3,000
Darlington (Christmas Parade)—Smokey Bear on Float.....	25,000
Allendale (Christmas Parade)—Smokey Bear on Float.....	3,000
Hampton (Christmas Parade)—Smokey Bear on Float.....	2,000
Walterboro (Christmas Parade)—Smokey Bear on Float.....	3,000
Cheraw (Christmas Parade)—Smokey Bear on Float.....	10,000
Swansea (Christmas Parade)—Smokey Bear on Float.....	500
Olar (Christmas Parade)—Smokey Bear on Float.....	1,000
Blackville (Christmas Parade)—Smokey Bear on Float.....	3,500
Aiken (Christmas Parade)—Smokey Bear on Float.....	2,500
St. Matthews (Christmas Parade)—Smokey Bear on Float.....	2,000
Boiling Springs (Christmas Parade)—Smokey Bear on Float.....	500
Lexington (Christmas Parade)—Smokey Bear on Float.....	3,000
Holly Hill (Christmas Parade)—Smokey Bear on Float.....	3,000
Williston (Christmas Parade)—Smokey Bear on Float.....	2,000
Barnwell (Christmas Parade)—Smokey Bear on Float.....	5,000
Pond Branch (Christmas Parade)—Smokey Bear on Float.....	500
Dillon (Christmas Parade)—Smokey Bear on Float.....	3,000
Edgefield (Christmas Parade)—Smokey Bear on Float.....	2,000
Marion (Christmas Parade)—Smokey Bear on Float.....	3,000
Lake City (Christmas Parade)—Smokey Bear on Float.....	5,000
Bennettsville (Christmas Parade)—Smokey Bear on Float.....	7,500
Newberry (Christmas Parade)—Smokey Bear on Float.....	10,000
Georgetown (Christmas Parade)—Smokey Bear on Float.....	6,000
Prosperity (Christmas Parade)—Smokey Bear on Float.....	3,000
Lancaster (Public Library)—Native Trees of Lancaster County.....	5,000
Bishopville (Court House)—Common Diseases of South Carolina Trees.....	4,000
Darlington (Southern 500)—Smokey Bear on Float.....	20,000
Dillon (Garden Club)—Wood Panels.....	300
Florence (Christmas Parade)—Smokey Bear on Float.....	6,000
Florence (Farmorama)—Wood Panels.....	3,000
Lake City (Garden Club Show)—Wood Panels.....	400
Loris—Gum Log Exhibit.....	2,000
Aynor (Christmas Parade)—Smokey Bear on Float.....	3,000
Loris (Christmas Parade)—Smokey Bear on Float.....	10,000
Manning (Christmas Parade)—Conservation.....	3,500
Orangeburg (Court House)—Insect Display.....	500

Total 244,798

GRAND TOTAL 1,063,798

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperated generously with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, and on the educational and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations. Radio stations serve the public exceptionally well by giving warnings, particularly during periods of high fire danger, and by giving tips on how to prevent fires.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that a total of 324 radio and TV programs on state parks and forestry were presented during the year. This number does not include, however, the many hundreds of recorded programs and film spots carried by radio and television stations, as made available through the National and Southern Cooperative Forest Fire Prevention Campaigns, and spot announcement material prepared by the Commission of Forestry for special use during periods of high fire danger.

TRAINING

A year-round program of training is conducted by the Commission of Forestry to make more effective the work of the Commission's personnel in carrying out their jobs. The Commission continually strives to improve its educational techniques and methods. A good training program makes more effective and interesting every news release, every program, talk, and slide lecture used to promote better conservation practices throughout the state. Whether he is a forester in the central office, the district office, or a county ranger or warden in the county, or a superintendent or ranger in the state park system, participating in the Commission's over-all training program is an important part of his efforts to serve the public and carry out the functions of the Commission of Forestry.

NEWS RELEASES AND ARTICLES

Newspapers provide opportunities to present the conservation education program of the Commission and excellent press coverage helped place forestry and state parks news before the people regularly.

During the year Commission personnel prepared 541 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, especially during serious fire situations, news items are given orally to individual papers and to the wire services.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or prepared mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

BOYS' FORESTRY CAMP

The fourteenth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the period July 31-August 5. Eighty-nine young men representing every county in the state attended the week-long camp. One boy from each county was selected by each county ranger from postal cards written by boys interested in attending the camp.

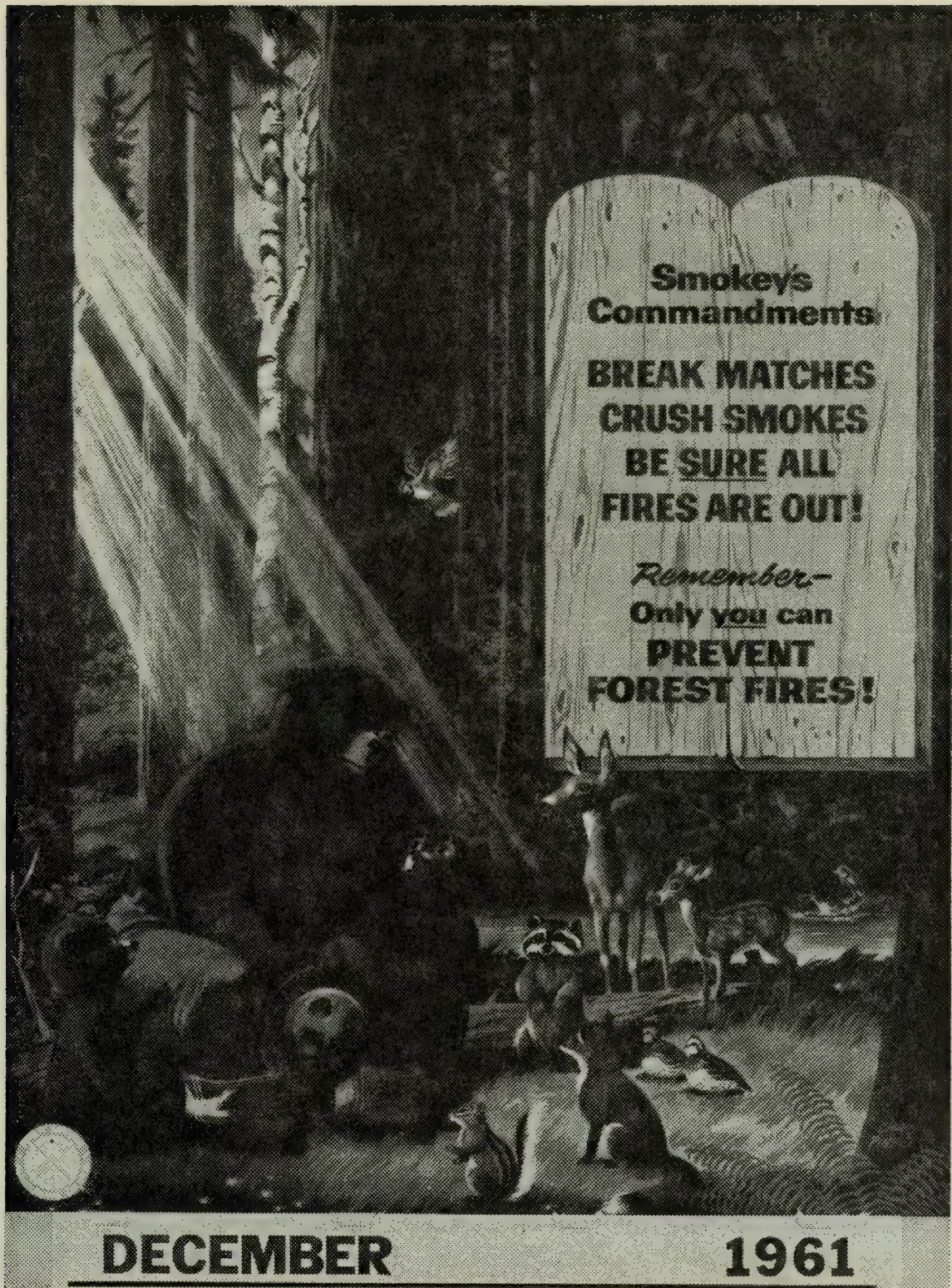
On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and recreation characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by state parks.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American For-



The 1961 wall calendar produced by the Commission of Forestry featured a most attractive picture of "Smokey's Commandments", the original art coming from the National Cooperative Forest Fire Campaign materials used earlier as a poster.

est Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies and associations, and other organizations, groups, and agencies which published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park installations with the Commission of Forestry. The Commission's exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given

a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. The members of the S. C. Tree Farm Committee during the year were:

Chairman—

H. F. Lathrop, Lightsey Brothers, Miley

Members—

Joe Youorski, Champion Paper and Fiber Company, Newberry

Harvey Rhettberg, Poinsett Lumber and Mfg. Co., Pickens

H. F. Bishop, Consulting Forester, Marion

C. P. Key, Lodge

T. M. Folger, Taylor-Colquitt Company, Spartanburg

Charles H. Flory, State Forester, Columbia

George B. Nutt, Clemson Agricultural College, Clemson

W. L. Hardin, West Virginia Pulp & Paper Co., Charleston

Chas. E. Millwood, International Paper Co., Georgetown

Martyn Cavanaugh, Champion Paper & Fibre Co., Newberry

A. C. Crews, Union Bag-Camp Paper Corp., Hampton

Bobby L. Womack, Cawtaba Timber Co., Clinton

James Chester, District Manager, AFPI, serves as Secretary to the State Tree Farm Committee.

As of June 30, 1961, there were 463 Tree Farms in the state comprising 1,883,321 acres.

SOUTH CAROLINA TREE FARMERS

NAME—ADDRESS	Certified Tree Farm Acreage
Borough Plantation Corp., Rt. 3, Sumter	5,500
McBride Dabbs, Mayesville	2,960
J. T. Johnson, Lynchburg	100
Sunny Hill Plantation, Est. of C. M. Leonard, Camden..	19,835
D. G. Lesslie, White Oak Farm, Rt. 2, Rock Hill	205

NAME—ADDRESS	Certified Tree Farm Acreage
Corey P. Key, Lodge	804
M. P. Howell, Jr., Route 1, Ruffin	2,400
Poinsett Lumber & Manufacturing Co., Pickens	68,451
Mrs. C. E. Bullard, Early Branch	180
Wade C. Harrison Estate, Rt. 2, Troy	3,400
W. D. Summer, Rt. 2, Newberry	70
Dr. C. L. Stevens, Campobello	163
Frank E. Timmerman, Edgefield	400
Pegues Family, RFD, Bennettsville	2,300
F. E. Cox, Rt. 2, Bennettsville	1,300
Tilghman Lumber Co., Marion	11,399
A. H. Rogers & Sons, Society Hill	550
Dargan Estate, E. E. Dargan, Conway	1,571
S. B. Huff, Rt. 2, Piedmont	75
G. L. Williamson, Rt. 1, Florence	800
Mrs. H. B. McCall, Effingham	1,000
Koppers Co., Inc., Wood Preserving Div., Charleston	9,474
E. B. Hare, Star Route, Westminster	60
Dixie Clay Co., Bath	1,600
John Tatum, Bamberg	100
J. F. Meares, Rt. 1, Nichols	200
H. N. Cousar, Rt. 1, Latta	185
Landon Thomas, 2226 Pickens Rd., Augusta, Ga.	515
J. R. Hawkins, Rt. 2, Hopkins	110
Mrs. S. B. McMaster, 1900 Heyward St., Columbia 5	2,900
Mrs. S. H. Mulford, Chicago Ave., Sebring, Fla.	275
S. J. Chandler, Minturn	400
J. B. Heins, Blythewood	85
J. Lamar Brantley, Manager, Good Hope Corporation, Ridgeland	12,348
International Paper Co., Southern Kraft Division, Georgetown	393,971
Mrs. E. M. and McIver Williamson, Mont Clare	1,225
George Roberts, Pineland	220
Oscar Wigington, Salem	5,181
Union Bag & Paper Corp., Savannah, Ga.	108,894
Champion Paper and Fibre Co., Newberry	174,541
J. H. A. Carter, Lodge	200
Niles C. Clark, Waterloo	630

NAME—ADDRESS	Certified Tree Farm Acreage
S. W. Mims, Route 1, Harleyville	1,100
A. W. Murray, 2203 Johnston St., Newberry	4,684
E. F. Conger, Box 149, Staunton, Va.	3,210
West Virginia Pulp & Paper Company, Georgetown	443,904
Ferdinand Gregorie, Mt. Pleasant	525
F. W. Atkinson, Rt. 4, Augusta, Ga.	125
Duke Power Company, Charlotte 1, N. C.	61,500
R. C. Kinard, Islandton	1,800
Mrs. Homer Saunders, Rt. 3, Walterboro	3,500
E. Heyward Benton, Rt. 4, Walterboro	300
E. D. Kinard, Islandton	268
M. W. Wise, Elko	187
Graniteville Company, Graniteville	15,550
O. L. Warr, Rt. 2, Timmons ville	200
E. V. Golding, Jr., Waterloo	135
J. T. Squires, Rt. 3, Latta	285
D. H. Sullivan, Box 115, Lexington	149
Continental Can Co., Augusta, Ga.	101,990
C. A. Harper, Estill	4,000
Bruce Harter, Fairfax	450
Dunbar Oswald, Rt. 2, Allendale	700
Guy V. Whitener, E. Wells Park Drive, Newberry	623
Ben Alderman, Alcolu	1,680
Mrs. Gertrude C. Floyd, Manning	445
G. M. Bagnal, Rt. 3, Manning	40
M. Earl Stone, Rt. 1, Saluda	194
F. M. and M. S. Dwight, Eastover	202
Olin J. Kinsler, Rt. 1, Columbia	205
A. J. Lever, Rt. 1, Columbia	112
J. D. Peeples, Early Branch	358
Kendall Mills—Wateree Division, Camden	450
James L. Sweat, Boykin	522
H. Gates Lloyd, Haverford, Pa. & Richard W. Lloyd, 1707 Lyttleton St., Camden	2,993
R. W. Lloyd, 1707 Lyttleton St., Camden	1,381
Cypress Woods Corp., Ridgeland	19,266
Brooks B. Weber, Rt. 5, Union	800
Hollidays Brothers, Galivants Ferry	2,000
Tuomey Hospital, Sumter	3,150

NAME—ADDRESS	Certified Tree Farm Acreage
George Patrick, Bowman	700
Anthony Fogle, Neeses	140
Union Memorial Presbyterian Church, Rt. 1, Winnsboro	548
Thomas W. Timms, Rt. 1, Box 179, Winnsboro	400
Cragmoor Farms, Moore	1,000
J. P. Brunson, Sr., Darlington	468
Eastover School, Eastover	5
William H. Wicker, University of Tennessee, Knoxville, Tennessee	586
P. T. Harris, Silverstreet	200
William E. Senn, Newberry	135
G. B. Reagin Est., Rt. 4, Newberry	345
Dr. J. E. Grant, 304 O'Neal St., Newberry	197
E. Guy Foster, McConnells	400
Charlton DuRant, Manning	229
E. E. Dargan, Conway	10,060
J. T. Clinkscales, Rt. 1, Abbeville	370
Charles B. Abell, Lowrys	440
Dr. Stanley C. Baker, Greenwood	100
Miss Nora Davis, Troy	181
W. R. Cothran Estate, 312 Grace St., Greenwood	490
J. Hearst Coleman, 248 Jennings Ave., Greenwood	400
Frank J. Wideman, 3232 Woodley Rd., N. W., Washington 8, D. C.	273
C. Cooper Sanders, Jr., and Howard P. Mabry, Greenwood	106
David Dows, Bradley	1,100
Henry G. Ligon, Rt. 2, Easley	24
J. B. Guess, Denmark	1,090
W. W. Woolsey, Montmorenci	500
Samuel H. Swint, Graniteville Company, Graniteville	327
Mrs. Margaret H. Lloyd, Camden	800
V. T. and Miriam A. Chastain, Box 367, Hampton	550
Willie Reed Bishop, Rt. 4, Walterboro	100
R. C. DeLoach, Furman	405
C. J. Cate, Jr., 129 S. Waccamaw, Columbia	860
John C. Billingsley, 924 Fair St., Newberry	1,917
Clyde D. Ware, Rt. 2, Iva	48
H. F. Bishop, 316 Woodland Drive, Marion	168

NAME—ADDRESS	Certified Tree Farm Acreage
Vance Perritt, Mullins	60
F. C. Edge, Rt. 5, Box 124, Conway	95
A. D. Strickland, Rt. 3, Loris	100
H. L. Bellamy, Wampee	25
J. M. Huber Corp., Langley	1,854
J. Ansel Caughman, Rt. 2, Leesville	1,100
G. E. King, McBee	851
R. D. King, McBee	282
Marlin H. Bruner and W. C. Nettles, Clemson	415
Marlin H. Bruner, Clemson	104
A. C. Flora, 1511 Hagood Ave., Columbia	204
St. Clair Davis, Marion	550
Frank H. Covington, 311 Fayetteville Ave., Bennettsville	136
Helen S. Tiencken, 4009 Fessenden St., N. W., Washington 16, D. C.	297
Stewart C. Hope, 1230 Lady St., Columbia	543
Dr. R. N. Kennedy, 15 E. Jones Street, Savannah, Ga.	622
Mrs. Sarah Goggans, Newberry	562
T. C. Jeter, 252 Sims Ave., Columbia	108
Dr. W. G. Gamble, Jr., 2010 Fifth Avenue, Bay City, Michigan	842
J. L. Mason, Clarks Hill	2,211
Atlantic Coast Line RR Co., Wilmington, N. C.	376
W. H. Bradford, Rt. 4, Sumter	200
H. M. Hentz & Son, Box 181, Newberry	8,434
Hampton & Branchville RR Co., Inc., Hampton	4,902
Edward Duckworth, 1126 Douglas St., Newberry	44
Horace T. Oxner, Rt. 2, Saluda	120
Vance & Dwigins Co., Newberry	500
J. T. Strahan Co., Port Wentworth, Ga.	5,894
Lightsey Bros. Lumber Co., Miley	40,576
Mrs. Sidney Legendre, Mt. Holly	6,410
Mrs. Hubert Boyd, Clinton	1,300
J. B. Frazier, III, Winnsboro	669
T. B. Amis, Box 71, Newberry	650
Mrs. T. A. Black, Sr., Rt. 2, Box 2, Ruffin	1,171
Bess Caldwell Bursinger, 2006 Luther St., Newberry	506
Albert G. McCaughrin, 1208 Calhoun St., Newberry	60
B. Hardin Keitt, 2311 Hassel Place, Charlotte 7, N. C.	874

NAME—ADDRESS	Certified Tree Farm Acreage
R. L. Fairey, Jr., Rowesville	121
Dr. M. D. Farrar, Rt. 2, Seneca	168
Thomas D. and Christine M. Hinkle, Sunset	225
Stiles M. Harper, Estill	2,654
Guy V. Whitener, Jr., E. Wells Park Drive, Newberry ...	453
Luke Winchester, Sunset	2,846
J. B. Frazier, III, Winnsboro	180
Dr. G. W. Cunningham, Laurens	114
G. S. Carter, Jr., Heriot St., Charleston 31	1,183
Floride M. and William Glover, Willowbank, Georgetown	70
Atlantic Creosoting Co., Inc., Box 553, Portsmouth, Va.	3,764
Vestal Lbr. & Mfg. Co., Box 1143, Columbia	5,922
W. W. Smith, Andrews	4,482
R. J. Makela, 530 W. Church St., Bishopville	981
D. L. Brown, 108 Kent Place, Spartanburg	89
Sam Hardin Smith, Rt. 3, Loris	290
Flack-Jones Lumber Co., Inc., Moncks Corner	3,200
C. Hutt Shelley, Nichols	433
Robert Kennerley, Newberry	65
R. M. Cooper & Archie Beattie, Wisacky	628
Est. of Susan Guignard (R. Sanders Guignard, Trustee), Parkland Inc., Cayce	2,760
Phillip R. Freeman, Oakland, Calif.; Mrs. E. C. Coker, Clemson; Mrs. B. W. Porter, New Orleans, La.	4,819
Porcher G. Rembert, Box 721, Sumter	100
H. Chr. Sonne, 15 Exchange Place, Jersey City 2, N. J.	9,500
Ellis Est. (H. H. Ellis, Agent), Rt. 5, Saluda	100
James Bledsoe, RFD, Saluda	15
H. T. Anderson, Macon, Ga.	410
Wade Hampton Cobb, 1215 Anthony Ave., Columbia	70
Weyman Coleman, Rt. 5, Saluda	1,000
Calvin Rivers, Chesterfield	1,700
H. W. Merck, Rt. 2, Bishopville	166
Dr. L. W. Anderson, Williston	1,200
W. C. Ellis, Jr., Rt. 4, Abbeville	291
Holly Hill Lbr. Co., Holly Hill	11,270
O. H. Wienges & Son, St. Matthews	2,437
Miss Stella M. Ruff, Jenkinsville	72
B. F. Williamson, Rt. 3, Darlington	1,700

NAME—ADDRESS	Certified Tree Farm Acreage
Dr. W. T. Martin, 605 McDaniel Ave., Greenville	125
William A. Douglas, Rt. 3, Box 98, Georgetown	49
Leger R. LaBruce, Georgetown	176
Norman G. Sifley, Orangeburg	111
Fred Norris, Eutawville	495
A. B. Chace & M. G. Chace, Jr., Yemassee	9,224
A. B. Chace, Providence, R. I.	2,577
Ben R. Wall, Jr., Chester	724
James A. Burden, Aiken	3,333
J. Cecil Berly, Pomaria	460
Raymond Booth, Aynor	60
S. A. Cooler, Walterboro	1,311
Boyd Jacobs, Georgetown	125
M. H. Jacobs Estate, Kingstree	1,988
Roscoe M. Hinson, Kingstree	534
P. T. Mace, Gresham	1,797
T. C. Coxe, Jr., Darlington	17,500
Robert Nichols, Conway	185
Mrs. L. Jennie Cottingham, Dillon	341
F. R. Hemingway Estate, Kingstree	87
Clyde Booth, Conway	288
Miss Rebecca Bryan, Conway	992
Mrs. Oline W. Smith, Box 305, Georgetown	23
Canal Wood Corp., Conway	2,520
Paul & E. B. Sanders, Ritter	3,943
J. L. Aiken, Pickens	42
J. H. Fair, Jr., St. Matthews	610
Jacob R. Rogers, Dillon	408
Lucas M. Dargan, Darlington	110
W. E. & L. M. Dargan, Darlington	420
Dr. A. M. Rose, Jr. and Lucile R. Deal, Marion	513
Dixon Tire Service, Lancaster	210
Miss Virginia Gourdin, Charleston	674
B. A. Fretwell, Newberry	150
Carolina Tree Farms, Inc., Newberry	1,660
J. W. Yonce, Jr., Johnston	150
Randolph Watson, Anderson	925
Don Watson, Blaney	42
B. W. Crouch, Saluda	120

NAME—ADDRESS	Certified Tree Farm Acreage
Mrs. Dorothy G. Dial, 819 Woodland Dr., Columbia	280
Dr. Frank C. Smith, 106 W. 7th St., Charlotte 2, N. C.	225
John E. Nisbet, Route 1, Lancaster	490
Oline W. Smith, Box 305, Georgetown, and S. O. Walters, Clemson Ave., Columbia	60
J. Ryan Jeter, Santuc	325
Erland Nelson, 1921 York Drive, Columbia	270
Mrs. Naida Nelson, 1921 York Drive, Columbia	67
R. A. Stevenson, Route 1, Richburg	1,219
C. C. Hare, Star Route, Westminster	87
V. M. Faircloth, Box 64, Andrews	117
T. B. Castles, 116 Brawley Street, Chester	152
Henry Savage, Jr., Box 234, Camden	2,485
Joseph F. Havel, Box 11, Pawleys Island	1,949
Dr. Harrison L. Peeples, Scotia	3,726
F. Hope Lever, Route 1, Columbia	87
Dr. Archibald Rutledge, Rt. 1, Box 47, McClellanville	2,000
J. D. Lane, Box 404, Marion	90
W. A. Coward, Aiken	960
W. W., R. R., and Betty Bruner, c/o First National Bank, Columbia	226
C. E. McDonald, E. College Street, Winnsboro	430
Lt. George T. Kreese, Jr., Hq. Sq. 10th TRW, Box S-15, APO 238, New York, N. Y.	185
H. R. Drake, RFD, Drake	2,100
Rodgers M. Reid, Richburg	600
Fred Hambright, Rt. 4, Chester	250
Col. Felix T. Simpson, CcMonnells	576
P. M. Brown, Rembert	240
Margaret E. Hall, Rt. 2, Box 142, Camden	33
J. C. Oswald, Allendale	1,317
E. T. Kelly, Willowbank, Georgetown	2,800
J. C. Winn, Plum Branch	3,026
Anna S. and L. H. McCallum, Lugoff	550
H. T. Oxner & J. H. Keener, Rt. 2, Saluda	183
Robert E. O'Brien, Rt. 2, Pendleton	750
Paul R. Gibson, Box 554, Fort Mill	77
J. E. & J. A. Tyler, Wagener	2,390
Robert M. Moore, Horatio	325

NAME—ADDRESS	Certified Tree Farm Acreage
Irwin M. Satterwhite, Sr.	300
John D. Muller, Jr., P. O. Box 564, Charleston	775
Arthur H. Parsons, Andrews	269
A. B. Heins, Ridgeway	175
Indiantown Presbyterian Church, RFD, Hemingway	60
F. E. Thurmond, RFD, Modoc	127
Robert Ligon Garrison, Mgr., Rt. 3, Piedmont	43
Miss Elizabeth Navarro, Kingstree	880
Spencer Baird, Route 3, Batesburg	204
David Baird, Route 3, Batesburg	100
M. A. Kirkland, RFD, Ridgeway	1,536
Mrs. Eloise C. Matthews, Box 425, Winnsboro	242
James Howard Wilson, RFD, Blythewood	17
John Roger Wilson, Blythewood	95
J. S. & F. C. McGregor, Ruby	350
Mrs. Elizabeth Turner Clark, Route 1, Blairs	765
J. W. Coleman, Route 1, Latta	127
Robert E. Darden, RFD 3, Orangeburg	143
Edgar Barnhill, Route 5, Box 122, Conway	200
S. D. Cox, Box 832, Conway	15
Jocelyn Clark, Springhill Plantation, Ridgeland	3,395
Fort Mill FFA Chapter, Box 206, Fort Mill	42
James Roof, Gaston	400
Beverly Herbert, Jr. & Georgia H. Hart, 712 Spring Lake Rd., Columbia	719
Mrs. M. L. (Belinda) Scott, Box 271, Batesburg	138
Mrs. Mary H. Taylor, 6230 Westshore Drive, Columbia and James H. Herbert, Delaplane, Va.	582
Carl B. & Martha Scott Laurence, 6409 Noble Ave., Columbia	101
A. H. & Mary Stokes, 536 N. Church St., Greenwood	575
The Surety Life Ins. Co., Greenville	941
Albert S. Nickles, Hodges	250
Mrs. Betty W. Jeffords, 4107 Kennilworth Rd., Columbia	72
P. L. Baughman, Hampton	294
Harry N. Burgess, Silverstreet	198

Names of Landowners Certified During the Past Year

NAME—ADDRESS	Certified Tree Farm Acreage
Bethea Estate, Route 1, Dillon	425
M. T. Atkins, Latta	180
Jack H. McLaurin, Dillon	75
R. E. Baker, Whitmire	70
E. B. Carlisle, 2105 Glenn Street, Newberry	1,600
R. Charles Bell, Winnsboro	40
Earl R. Alford, Route 1, Latta	300
Luther B. Rogers, Jr., Route 1, Latta	250
Seaboard Timber Corp., Conway	810
Rosa V. Parker, Pawleys Island	69
Mrs. Frampton Toole, Box 403, Aiken	40
Dr. Harvey McClure, Bishopville	200
Rosenberg Estate, Abbeville	300
W. C. Parham Farms, Latta	600
Billy G. Rogers, Route 3, Dillon	1,000
Rogers & Gaddy, Dillon	275
John Alton McLeod, Route 1, Latta	300
F. L. Bethea, RFD, Dillon	300
John H. Temple, 16 Wahackme Rd., New Canaan, Conn.	75
Henry T. Everett, Summerton	1,801
Thomas & Edward King, McBee	331
Mulberry Plantation Corp., Camden	3,396
J. H. Perryman, P. O. Box 411, Walterboro	40
Brown-Lucius, Dillon	56
Phil B. Brown, 803 N. 8th Ave., Dillon	182
Jewel P. McLaurin, 501 E. Cleveland St., Dillon	180
G. Warren Roberts, P. O. Box 1068, Walterboro	270
J. M. Russell, Jr., Holly Hill	407
Mrs. Bennie Lee Thompson, Thompson St., Walterboro	5,062
Misses Alice, Annie, Elizabeth and Sue Doty, Winnsboro	1,403
Charles E. & Charles M. Gibson, Hollywood	600
Thomas B. Willis, Cottageville	360
Robert M. Hollings, 25 Queen St., Charleston	332
Charlie W. Woods, Pineland	249
Mr. & Mrs. S. D. Ellison, Winnsboro	650
A. D. Bethea, Box 4067, Dillon	200
Edward P. Knight, Harleyville	141
James L. Littlejohn, Box 753, Jonesville	250

NAME—ADDRESS	Certified Tree Farm Acreage
J. B. McGuirt, Liberty Hill Road, Camden	1,157
Elizabeth A. McLeod, Route 1, Latta	600
W. T. Littlejohn, Rt. 1, Jonesville	450
Mrs. C. S. Coker, Greenwood	40
William M. Ellen, 220 Davis Street, Bishopville	488
J. C. Abrams, Box 156, Whitmire	348
Mrs. Ruth J. Amis, Newberry	200
Wm. H. Young, Whitmire	178
W. H. Paul, Route 2, Conway	170
George Young, Whitmire	500
D. R. Palston, Route 1, Bethune	30
R. Lee McLaurin, RFD, Dillon	125
J. M. Russell, Jr. & Dr. S. J. McCoy, Holly Hill	797
H. E. & J. B. Shuler, Route 1, Holly Hill	741
Mr. & Mrs. W. R. Traylor, Great Falls Road, Winnsboro	483
L. L. Perry, Route 1, Myrtle Beach	108
B. H. Kinard, Lodge	600
Midway Plantation, c/o V. N. Thornhill, 8 State St., Charleston	509
Wm. Frank Hardee, Route 5, Box 68, Conway	29
S. W. Sherrard, Route 3, Abbeville	320
Louis F. Spearman, P. O. Box 101, Chappells	1,500
Albert P. Judy, Reevesville	200
Mrs. William E. Simms, 1427 4th St., New Orleans 13, La.	92
E. E. Epting, 1131 Douglass St., Newberry	100
F. O. Wyly, 118 Montclair Ave., Greenville	272
James H. Mason, Route 3, Winnsboro	987
J. M. Marshall, Jr., Route 3, Greenwood	164
Rev. John S. Land, 5300 S. Main St., Houston, Texas	155
R. K. Whaley, Jr., Route 1, Box 85B, Warrenville	292
Z. C. Herlong, Route 2, Blackstock	2,000
John A. McAllister, Mt. Carmel	1,622
Miss Sarah Coleman, Blairs	200
E. Maxcy Stone, Box 383, Newberry	96
David G. Traylor, 2409 Craig Road, Columbia	249
W. N. Jefferies, Burlington N. C. & T. R. Jeffries, Montgomery, Ala.	700
Glenn Bell, Bamberg	203
Mrs. Doris Parks Gallagher, Rt. 1, Jonesville	150
John Tatum, Jr., Bamberg	600

NAME—ADDRESS	Certified Tree Farm Acreage
Russell F. Walthour, c/o Glenn Bell, Bamberg	335
The State-Record Co., Columbia	385
J. B. Ellis, Route 5, Box 185	155
Catawba Timber Co., Catawba	20,584
Chester M. Kearse, RFD, Fairfax	600
Kearse Mfg. Co., Olar	2,674
W. H. Kearse, Box 138, Olar	590
W. H. and C. J. Savage, Savage Bldg., Camden	1,883
C. J. Ray, Box 88, Denmark	220
W. S. Faust, Est., c/o C. J. Ray, Box 88, Denmark	270
J. C. McTeer, Early Branch	300
Miss Sarah Aull, 3901 Drew St., Houston 4, Texas	53
J. W. Pitts, Est., c/o James J. Pitts, 1715 Park Ave., Florence	245
Miss Margaret Moore, 205 N. White St., Lancaster	954
C. L. Dunbar, Martin	3,500
W. S. Birge, Birge Bldg., N. Polk & 7th St., Amarillo, Texas	600
P. B. Burwell & L. B. Litchfield, Walterboro	327
Garber Est., c/o John M. Faison, Citizens & Southern Bank, Columbia	439
Ansley Watson, 935 Franklin Rd., Tampa, Florida	224
Mrs. Caroline Reed, 1200 Washington Ave., Fredericksburg, Va.	344
H. L. Harmon, Box 38, Lexington	125
T. F. Keller, 1025 W. Markham, Durham, N. C.	130
Aull Estate, c/o Mrs. W. B. Aull, 201 West Rice St., Landis, N. C.	466
Hodges T. Harmon, Box 38, Lexington	70
Carlisle D. Bryant, 214 E. Marion St., Mullins	18
Hope Plantation, c/o Northrup R. Knox, Jacksonboro ...	2,341
John Henry Hair, Blackville	45
Mr. & Mrs. Charles H. Sipple, III, 20 Pinewood Ave., Savannah, Ga.	640
Dan L. Rhoad, Jr., Branchville	350
J. C. Kearse & J. B. Ness, Bamberg	80
J. C. Kearse, Jr., Bamberg & Joan K. Kennedy, Batesburg	269
T. H. Mims, Harleyville, Route 1	500
Luther H. Sease, Route 1, Pomaria	150
J. Carl Kearse, Bamberg	76

NAME—ADDRESS	Certified Tree Farm Acreage
C. B. Mobley, 818 Aiken St., Columbia	200
S. W. Mims, Jr., Route 1, Harleyville	225
W. D. Rhoad, Bamberg	148
William Hubert Craven, 108 Park St., Bamberg	300
James S. McCormack, Box 47, Olar	237
R. L. Kelly, Route 1, Box 64, Ridgeway	50
Robert W. Thomas, Box D, Ridgeway	345
P. H. Cave, Olar	233
J. Ralph Williams, 2207 Nance St., Newberry	120
Strother C. Paysinger, 1524 Johnstone St., Newberry	200
Horace F. Lominick, Route 1, Pomaria	80
Marion W. Felker, Route 1, Newberry	100
Dr. S. H. White, Box 364, York	360
Mr. & Mrs. Lyon Fellers, Prosperity	60
Thomas R. Wolfe, Summers Bldg., Orangeburg	1,800
Dr. John R. Harvin, et al, Sumter	258
Mrs. Ollie F. Cope, 712 Schley St., Hampton	155
David H. Kennedy, 204 E. Main St., Williston	600
Henry M. Chaplin, Neeses	242
George C. Grobusky, Walhalla	22
W. A. Byars, Lowrys	240
John D. Branch, Jr., Rt. 1, Rock Hill	105
E. V. Ragsdale, Box 783, Orangeburg	210
Paul Inabinet, North	303
J. P. Byrd, Route 4, Lancaster	197
W. T. Senn, P. O. Box 162, Seneca	40
T. M. Hall, Route 2, Camden	110
Smith G. Matthews, Blackville	319
Roy R. Cartee, Route 1, Easley	23
Rains Gin Company, Rains	60
W. W. Dukes, Jr., P. O. Box 506, Orangeburg	233
Edward R. Finlay, 430 Edisto, Columbia	380
J. W. Harper, Harper Transport Co., Ulmers	64
Dr. A. W. Frierson, Kingstree	30
J. T. Berry, Box 334, Blackville	200
W. N. Kellahan, Kingstree	180
Mrs. Effie R. Eaddy, Route 4, Box 178, Lake City	25
Robert Faires, 113 Briarwood Lane, Summerville	300
John J. Cain, Jr., Eastover	50
D. M. Rogers, Rt. 2, Ridgeville	1,100

NAME—ADDRESS	Certified Tree Farm Acreage
Harry R. Davis, Rt. 1, Camden	86
Mr. & Mrs. W. D. Chitty, Denmark	131
Rev. & Mrs. G. A. Bowdler, Rt. 1, Box 485, West Columbia	8
O. E. Baker, Rt. 1, Nichols	100
Dr. Henry W. Gibson, Barnwell	430
Mrs. Eva S. Ray, Rt. 1, Lake View	450
Wannamaker Oil, Inc., Box 110, Cheraw	500
John W. Smith, Rt. 4, Lancaster	500
Mr. & Mrs. O. W. Black, Jr., Calhoun Street, Saluda	740
Manning R. Wise, Rt. 3, Chester	213
T. W. Long, Box 1863, Columbia	150

STATE PARKS

Land!

“This is a great country, but it is an inescapable fact that while we will always have more and more people there is not going to be more and more land.”

John H. Hinman, Pres.

American Forest Products Industries
New Orleans meeting, April, 1961

INTRODUCTION

South Carolina's state park system began back in 1934 with 700 acres of land—a tract purchased in Chesterfield County sandhills just south of Cheraw—purchased with funds raised by public subscription. Thus the beginning was from the grass roots.

This was 27 years ago. The 700 acres quickly grew to 7,000, as the Resettlement Administration, under Franklin D. Roosevelt, purchased “submarginal” lands and established “Recreational Demonstration Areas.”

Before the close of the year areas in Aiken, Dorchester, Colleton, York, Horry and Sumter Counties were acquired for the establishment of Aiken State Park, Givhans Ferry State Park, Kings Mountain State Park, Myrtle Beach State Park and Poinsett State Park. These five added 9,755 acres, and the state parks movement was assured.

The present-day system embraces more than 48,000 acres and the 23 state parks and five historical areas serve an annual attendance of over three million visitors.

An operational budget of \$369,000 for parks, and \$20,000 for historical areas, or a cost of approximately 11 cents per park visitor was available. It has never been the policy to make the state parks self-supporting; consequently, many of the facilities are available to the public without charge. No admission fee is levied and parking is free. Nevertheless, total park revenues amount to \$125,000 annually.

ATTENDANCE

For the past half-dozen years, since 1955, more than three million park visitors have been counted annually at the 22 white state parks, five Negro areas, and four historical sites. Visitation



Swimming, in both pool and ocean, family camping, fishing, and other facilities attracted more visitors to Myrtle Beach State Park than have ever been recorded at a South Carolina State Park in one year.

at Myrtle Beach State Park exceeds any total ever registered at a South Carolina state park. For the fiscal year 1960-61, 973,940 individuals visited this popular seashore area. Three outstanding features account for the heavy use—the fishing pier, extending 750 feet out into the ocean; the fresh-water swimming pool, a supplement to the surf bathing; and the 150-site family camping area. Other contributing factors to the large attendance are the general growth in the population of the “Grand Strand,” the presence of the Air Force installation, and the attractiveness of the natural features of the well-wooded oceanside park. Sesqui-centennial, near Columbia, counted 316,201 park users; while Cheraw, Hunting Island, Kings Mountain, Paris Mountain and Table Rock each had more than 200,000 visitors during the year.

These visitors traveled in 797,661 cars, of which 179,859 bore out-of-state licenses.

There were a million-and-a-quarter picnickers and half-a-million swimmers.

A detailed table of attendance and use is included herein.

APPROPRIATIONS

The operating budget for the fiscal year 1960-61 totaled \$369,746, plus \$36,561 for Historical Areas, (which includes \$25,000 for the purchase of “Rose Hill,” the home of South Carolina’s secession governor, William H. Gist, in Union County).

The operating budget is not keeping up with maintenance needs and the requested operating budget of approximately \$400,000 for the state parks is a realistic figure.

Funds for capital improvements in certain new parks are necessary if areas, such as Huntington Beach, Hartwell, Clark Hill and Croft are to be developed for public use.

FAMILY VACATION CABINS

Family vacation cabins have long been an accepted facility in the state parks. For more than a generation South Carolinians have sought reservations of these cabins for summer vacations or weekend outings in the fall and spring.

The 67 cabins in nine state parks—located from the mountains to the seacoast—accommodated nearly a thousand white families during the year. The cabins for Negro families received only limited use.

Below is a table of the distribution of the cabins, with their rental rates.

Park—County	Cabins	Summer Season Weekly	Off Season Week-End
Cheraw—Chesterfield	9	\$30—\$40	\$10 —\$13.50
Givhans Ferry—Dorchester	5	\$30	\$10
Hunting Island—Beaufort	3	\$45	\$15
Myrtle Beach—Horry	5	\$45	\$15
Oconee—Oconee	20	\$24—\$35—\$38	\$11.75—\$12.50
		\$40	\$13.50
Poinsett—Sumter	6	\$18—\$30—\$36	\$6 —\$10
		\$46	\$12 —\$15
Santee—Orangeburg	2	\$30	\$10
Table Rock—Pickens	12	\$33—\$38—\$40	\$11 —\$13.50
		\$46	\$12.50—\$15.00
Facilities for Negro Families:			
Hunting Island—Beaufort	2	\$30	\$10
Pleasant Ridge—Greenville	2	\$30	\$10

All cabins have electric lights, electric stoves, and electric refrigerators, bathrooms and running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin user must bring blankets, bed linens and towels, and silverware, such as knives, forks and spoons.

During the period June 1st through Labor Day summer rates are in effect and cabins are rented for a period of one week only. After Labor Day and through the following May, cabins are available at reduced rates, and for weekend use. Many cabins are winterized and comfortable throughout the year.

To give every family an equal opportunity to obtain a cabin for a summer vacation, cabin assignments are made in a public drawing. All South Carolina applications are considered first; then out-of-state requests are reviewed.

Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, Box 357, Columbia, S. C., and must be received in Columbia prior to March 1.

GROUP CAMPS

Seven group camps—six for white and one for Negro campers—located at four state parks, Paris Mountain, Cheraw, Kings Mountain and Poinsett, continue to supply the facilities for several thousand children seeking out-of-doors adventure. With a daily capacity of 600 campers and about 13 weeks in the summer season, some 54,000 camper days are counted at the seven areas. Church and school groups, Boy Scouts and Girl Scouts, YMCA's and YWCA's make up the greater portion of the use. There is a rental charge of 45 cents per day, per person, for the camps which provide facilities for 42 to 140 campers.

Equipment and facilities are similar in all camps. The camps are used throughout the summer vacation season without any vacancies. Out-of-season use during the spring and fall is increasing. Year-round use is not practical as the facilities are not adapted to winter use.

TENT AND TRAILER CAMPING

The number of families seeking adventure in the great outdoors continues to increase and each year more and more spaces have to be added and new areas developed for the tent and trailer campers.

Family camping is a nationwide activity. National and state parks play host to ever increasing numbers of family campers and South Carolina's state parks participate fully in this activity.

Sixteen state parks and one wayside area have designated areas for family camping with developed facilities such as water and electrical connections, tables, latrines and garbage collection.

The distribution of these facilities is shown in the following table:

FAMILY CAMPING AREAS AND FACILITIES

Park Location	FACILITIES								
	No. of Units	Flush Toilets	Showers	Electric Connections	Water Connection	Outdoor Grill	Picnic Tables	Miles to Gas and Grocery	Other Facilities
AIKEN—18 miles E. Aiken	4	*	*	X	X	X	X	3	1 2 3 4
BARNWELL—3 miles S. Blackville	8	X	*	X	X	X	X	2	1 2 3 4
CHERAW—4 miles S. Cheraw.....	18	X	X	X	X	X	X	2	1 2 3 4
CHESTER—3 miles SW Chester	6	X		X	X	X	X	2	2 3 4
COLLETON WAYSIDE— 12 miles N. Walterboro	4	X		X	X	X	X	1	2
GIVHANS FERRY—15 mi. W. Summerville	10	*	*	X	X	X	X	1	1 2 3
GREENWOOD—17 miles E. Greenwood....	25	X	*	X	X	X	X	3	1 2 3
HUNTING ISLAND—16 mi. E. Beaufort ..	36	X	*	X	X		X	4	1 2
KINGS MOUNTAIN—12 miles N. York ...	20	X	X	X	X	X	X	1	1 2 3 4
LITTLE PEE DEE—12 miles S. Dillon	10	X	*	X	X		X	6	1 2 3 4
MYRTLE BEACH—3 mi. S. Myrtle Beach..	150	X	X	X	X		X	2	1 2
OCONEE—8 miles NW. Walhalla	20	X	*	X	X	X	X	2	1 2 3
POINSETT—18 miles SW. Sumter	10	X	X	X	X	X	X	9	1 2 3
RIVERS BRIDGE—6 miles W. Ehrhardt ..	10	X		X	X	X	X	5	1 2 3
SANTEE—5 miles W. Santee.....	15	X	*	X	X	X	X	4	1 2 3
SESQUI-CENTENNIAL—13 mil. NE. Col'bia	25	X	*	X	X	X	X	3	1 2 3
TABLE ROCK—16 mi. N. Pickens	26	X	*	X	X	X	X	4	1 2 3

SYMBOLS: x—"Yes"

*—Available at Bathhouse

1—Swimming

2—Fishing

3—Boating

4—Hiking and Trails

A "Unit" is a space designed to accommodate from two to six people.

Camping areas are "open" from 8:00 A.M. to 10:00 P.M. the year around.

Pets must be kept on leash.

No advance reservations.

CHARGES: Camping charge at above parks is \$1.50 per night, per unit. Limited camping facilities available at 8 other areas at a cost of \$1.00 per night.

ACQUISITIONS AND DEVELOPMENTS

Since the first state park area was acquired early in 1934, twenty-two other areas have rounded out South Carolina system of state parks "from the mountains to the sea."

Cheraw was the first area acquired, but Myrtle Beach was the first area ready to receive visitors—on July 1, 1936.

From the beginning, areas were planned and developed for both white visitors and Negro park users.

Now there is a trend in emphasizing historical sites. "Rose Hill," the Gist mansion in Union County, and a portion of the old colonial town of Dorchester, near Summerville, have been acquired and a repair and restoration program is in progress.

The table following gives names, acreages, locations, date of establishment or acquisition and date opened to visitors of the several state parks.

Park Name	Acreage	Location—County	Date Estab. or Acquired	Date Opened to Visitors
Aiken	1,067	Aiken	July 1934	Aug. 1936
Andrew Jackson Historical... ..	360	Lancaster	April 1953	Mar. 1957
Barnwell	307	Barnwell	July 1937	Aug. 1939
Cheraw	7,361	Chesterfield	Mar. 1934	July 1939
Chester	523	Chester	May 1935	July 1939
Colleton Wayside	35	Colleton	May 1938	June 1940
Croft	7,135	Spartanburg	May 1949	June 1949
Edisto	1,255	Charleston Closed Feb. 1956....	Feb. 1935	June 1937
Givhans Ferry	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood	914	Greenwood	April 1938	July 1940
Hunting Island	5,000	Beaufort	July 1938	June 1941
Huntington Beach	2,500	Georgetown	May 1960	Under Const.
Kings Mountain	6,141	York-Cherokee	Nov. 1934	June 1940
Lee	2,839	Lee	June 1935	June 1941
Little Pee Dee	835	Dillon	June 1951	June 1955
Myrtle Beach	312	Horry	Aug. 1934	July 1936
Oconee	1,165	Oconee	July 1935	June 1937
Old Dorchester Historical.. ..	21	Dorchester	Jan. 1960	Jan. 1960
Paris Mountain	1,275	Greenville	April 1935	June 1937
Pleasant Ridge	300	Greenville	Sept. 1950	June 1955
Poinsett	1,000	Sumter	Aug. 1934	Aug. 1936
Rivers Bridge	390	Bamberg	May 1945	July 1945
Rose Hill Historical.....	41	Union	July 1960	Dec. 1960
Santee	2,364	Orangeburg	Jan. 1942	June 1949
Sesqui-Centennial	1,500	Richland	Aug. 1937	June 1940
Table Rock	2,860	Pickens	May 1935	June 1940
48,735				

HISTORICAL AREAS

"Rose Hill," the three-story brick mansion, built in 1828, was the country home of William H. Gist, South Carolina's Secession Governor. It is approximately ten miles south of the town of Union, near the Tyger River. The formal garden surrounding the house is famous for its roses and boxwood. A 15-acre grove of large hickory and oak trees lies between the house and County Road No. 16.



The tabby walls of the Revolutionary War fort in the colonial town of Dorchester, on the bank of the Ashley River, are being repaired as a part of the restoration at Old Dorchester Historical State Park.

Extensive repairs to the interior of the 130-year old house are underway by contract and park personnel and an advisory committee has been formed. An acquisition committee of interested persons is seeking period furniture for the residence and they have enlisted the aid of a committee from the Carolinas Chapter of the American Institute of Decorators.

Restoration of certain streets, lots and parade ground of the old colonial town of Dorchester is underway. Repairs are being made to the tabby walls of the Revolutionary War fort, within the town, on the bank of the Ashley River. The crumbling ruins of the tower of St. George Parish Church, within the town limits, needed immediate attention and a contract was let to halt the decay and point-up the fine old brickwork.

The town of Dorchester was founded in 1696 by a band of Congregationalists from Dorchester, Massachusetts. The St. George Church was built about 1720 as a Parish of the Church of England. The fort dates from the Revolution.

A dwelling has been constructed on the area as a residence for

the superintendent. Restoration work will continue.

Memorials within the historic branch are:

<i>Name</i>	<i>County</i>	<i>Acreage</i>
Eutaw Springs Battleground	Orangeburg	2.7
Fort Watson Indian Mound	Clarendon	2.0
Rose Hill	Union	41.0
Old Dorchester	Dorchester	21.0
General Thomas Sumter Burial Ground	Sumter	5.0
		<hr/> 71.7

RECOMMENDATIONS

The Division of State Parks recommends:

1. A budget of approximately \$400,000 to adequately operate the several state parks and to maintain equipment and facilities.
2. Appropriation of funds for capital expansions and development as follows:
 - (a) Huntington Beach State Park area, Georgetown County, bathhouse, picnic areas, water and sewer systems and miscellaneous developments in both white and Negro areas of this new seashore area—\$75,000.
 - (b) Continuing the development of the large Croft State Park area in Spartanburg County—\$50,000.
 - (c) Beginning of development of State Park areas on Hartwell Reservoir in Anderson County and Clark Hill Reservoir in McCormick County—\$100,000.

Detailed budget requests will be filed with the Budget and Control Board.

3. That funds in the amount of \$20,000 be made available to inaugurate a program of interpretation at both state parks and historical memorials to the end that visitors can more fully understand and appreciate the natural and historical features of the areas.

SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps †	Museum	Trailer & Tent Camping ‡
AIKEN Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x			x
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x	
BARNWELL Blackville, S. C.	x	x	x	x	x	x	x				x		x		x			x
CHERAW Cheraw, S. C. { White Area. Negro Area.	x x	x x	x	x x	x x	x x	x x	x			x		x x	x	x	x		x x
CHESTER Chester, S. C.	x	x				x	x				x				x			x
COLLETON WAYSIDE PARK Canadys, S. C.	x	x				x	x											x
CROFT Spartanburg, S. C., RFD.....	(Under Construction)																	
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																		
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x			
GREENWOOD Ninety Six, S. C., RFD. { White Area. Negro Area.	x x	x x	x	x	x	x x	x x						x		x			
HUNTING ISLAND Frogmore, S. C. { White Area. Negro Area.	x x	x x		x x	x x		x x	x x					x x		x			x
HUNTINGTON BEACH Pawleys Island, S. C.....	(Under Construction)																	
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x		x
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x			x	x		x		x			
LITTLE PEE DEE Dillon, S. C.	x	x	x	x	x	x	x											
MYRTLE BEACH Myrtle Beach, S. C.	x	x		x	x		x	x		x	x		x		x			x
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x		x			x
OLD DORCHESTER HISTORICAL Summerville, S. C.....																		
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x		
PLEASANT RIDGE (For Negroes) Cleveland, S. C.	x	x		x	x	x	x	x					x					
POINSETT Wedgfield, S. C. { White Area. Negro Area.	x x	x x	x	x x	x x	x x	x x	x				x	x x		x	x		x
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x			x
ROSE HILL HISTORICAL Union, S. C.....																		x
SANTEE Elloree, S. C., RFD.....	x	x		x	x	x	x	x					x		x			
SESQUI-CENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x			
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x			

* Where no regular barbecue pit and shelter are established, temporary arrangements can be made at all Parks.

† Two camps each at Cheraw, Kings Mountain and Poinsett.

‡ Where no developed camping areas are established, temporary arrangements can be made at all parks.

S. C. STATE COMMISSION OF FORESTRY—DIVISION OF STATE PARKS
SUMMARY OF STATE PARK USE—JULY 1, 1960—JUNE 30, 1961

NAME OF PARK	Cabin Days Occupied	Cabin Oc- cupants	Group Camps	Tents and Trailers	Fishermen	Picnickers	Swimmers	Out-of- State Cars	Total Cars	Total Visitors
Aiken	131	775	.....	1,003	3,442	32,591	5,254	517	9,731	42,962
Andrew Jackson .....	.....	.....	.....	.....	.....	8,138	.....	2,286	7,013	21,565
Barnwell .....	.....	.....	.....	1,204	.....	44,751	8,933	555	18,466	84,261
Chehaw	564	3,764	16,710	2,285	14,446	108,993	72,128	17,060	52,205	251,300
Campbells Lake (N) .....	.....	.....	.....	.....	1,036	9,495	4,257	1,029	3,404	16,495
Chester .....	.....	.....	.....	147	1,418	15,050	.....	1,225	10,114	36,856
Croft .....	.....	.....	.....	1,349	.....	10,350	15,209	275	10,480	41,920
Givhans Ferry	216	1,325	.....	1,483	.....	18,222	6,677	641	8,211	31,154
Greenwood .....	.....	.....	.....	5,221	9,160	63,729	9,923	1,250	42,972	173,067
Greenwood (N) .....	.....	.....	.....	.....	1,635	7,963	.....	118	4,633	20,595
Fort Dorchester .....	.....	.....	.....	.....	.....	.....	.....	36	1,221	3,269
Hunting Island	699	3,445	.....	6,293	19,640	62,555	59,035	9,955	42,990	175,215
Hunting Island (N)	28	122	.....	.....	1,635	12,700	7,486	870	5,990	25,030
Kings Mountain .....	.....	.....	15,639	2,718	1,752	83,285	10,184	33,052	49,047	211,747
Lee	28	152	.....	217	2,865	11,195	5,014	294	6,865	27,460
Little Pee Dee .....	.....	.....	.....	2,068	9,339	21,182	7,526	1,386	15,575	46,693
Myrtle Beach	741	4,245	.....	83,277	24,734	69,006	68,755	79,290	225,893	973,940
Oconee	1,683	9,859	.....	4,611	696	33,667	29,771	832	23,841	97,307
Paris Mountain .....	.....	.....	3,818	1,562	.....	109,276	25,129	1,962	59,209	241,940
Pleasant Ridge (N)	68	357	.....	146	603	9,807	1,199	278	4,571	19,444
Poinsett	280	1,900	4,688	3,794	810	51,672	17,833	2,954	27,158	100,309
Mill Creek (N) .....	.....	.....	4,084	.....	486	6,875	8,571	151	4,272	17,266
Rivers Bridge .....	.....	.....	.....	528	460	20,644	11,470	319	10,583	40,321
Santee	229	1,280	.....	3,145	10,358	25,769	13,068	1,801	15,700	67,890
Sesqui-Centennial .....	.....	.....	.....	3,534	1,566	164,547	53,863	13,637	77,963	316,201
Table Rock	1,217	7,585	.....	7,249	2,285	151,447	31,296	4,572	51,997	211,976
Colleton .....	.....	.....	.....	195	.....	15,543	.....	3,514	7,557	28,093
TOTALS	5,884	34,809	44,939	132,089	109,486	1,168,452	472,581	179,859	797,661	3,324,276

(N)—Negro.

ADMINISTRATION

SUMMARY

No state-appropriated funds were provided for salary or wage adjustments and as a result losses of both technical and other personnel continued at an excessive rate. A total of 64 employees resigned during the year of which 61% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and Park program \$3,076,976.46. Of this total the Division of Forestry expended \$2,541,870.58 and the Division of State Parks \$535,105.88 (see Appendix for detailed explanation of funds available and expenditures made.) State appropriated funds amounted to \$1,795,880.00 for the Division of Forestry and \$369,746.00 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 92 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 19 accidents. Of the 19 accidents which occurred, only eight were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and the assistance of the National Safety Council.

Several years ago the Commission instituted a safe driving program sponsored by the National Safety Council. Under this program a driver must operate a vehicle on official business for twelve consecutive months without a preventable accident before entitled to the first-year safe driving award. If a preventable accident occurs during the first three years or before the third

year award has been received, the driver's safe driving record is cancelled and he is required to begin again. Should a preventable accident occur after the third year award is received, the driver is penalized and is requested to operate for twelve additional months from date of accident before entitled to the next year award.

A review of the Commission's employees' safe driving records indicates that 167 of the 405 drivers have operated Commission or privately owned vehicles on official business for a period of one to five years without an accident; 94 for six to ten years; 87 for eleven to fifteen years; 57 for sixteen years and over.

COMMISSION PURCHASING

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and simplifying fiscal procedure. A total of 1,368 requisitions were received and 1,238 purchase orders were issued during the year.

Visual inventories were made during the year of all equipment in use by the Commission. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,828,320. In addition, the Commission has real property and improvements now estimated to be worth \$13,292,084.

PERSONNEL

A large number of Commission employees continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Eleven per cent of the total personnel resigned during the year; county unit personnel were the highest per cent to resign.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

PERSONNEL LOSSES**Division of Forestry****Resignations—1960-61**

Foresters	3
Technical	3
Head, Fiscal and Accounting	1
District Radio Technician	1
Clerk-Stenographers	11
Nursery Foreman	1
Rangers	4
Wardens	10
Towermen	15
Tractor Operators	10
Heavy Suppression Unit Operator	1
Assistant Maintenance Mechanic	1
Non-technical	55
Total Resignations	58
Losses Due to Promotions or Change in Positions	
Acting Ranger	1
Wardens	4
Towerman	1
Tractor Operators	2
Mechanic Equipment Operator	1
Total Losses, Division of Forestry	67

Division of State Parks
Resignations—1960-61

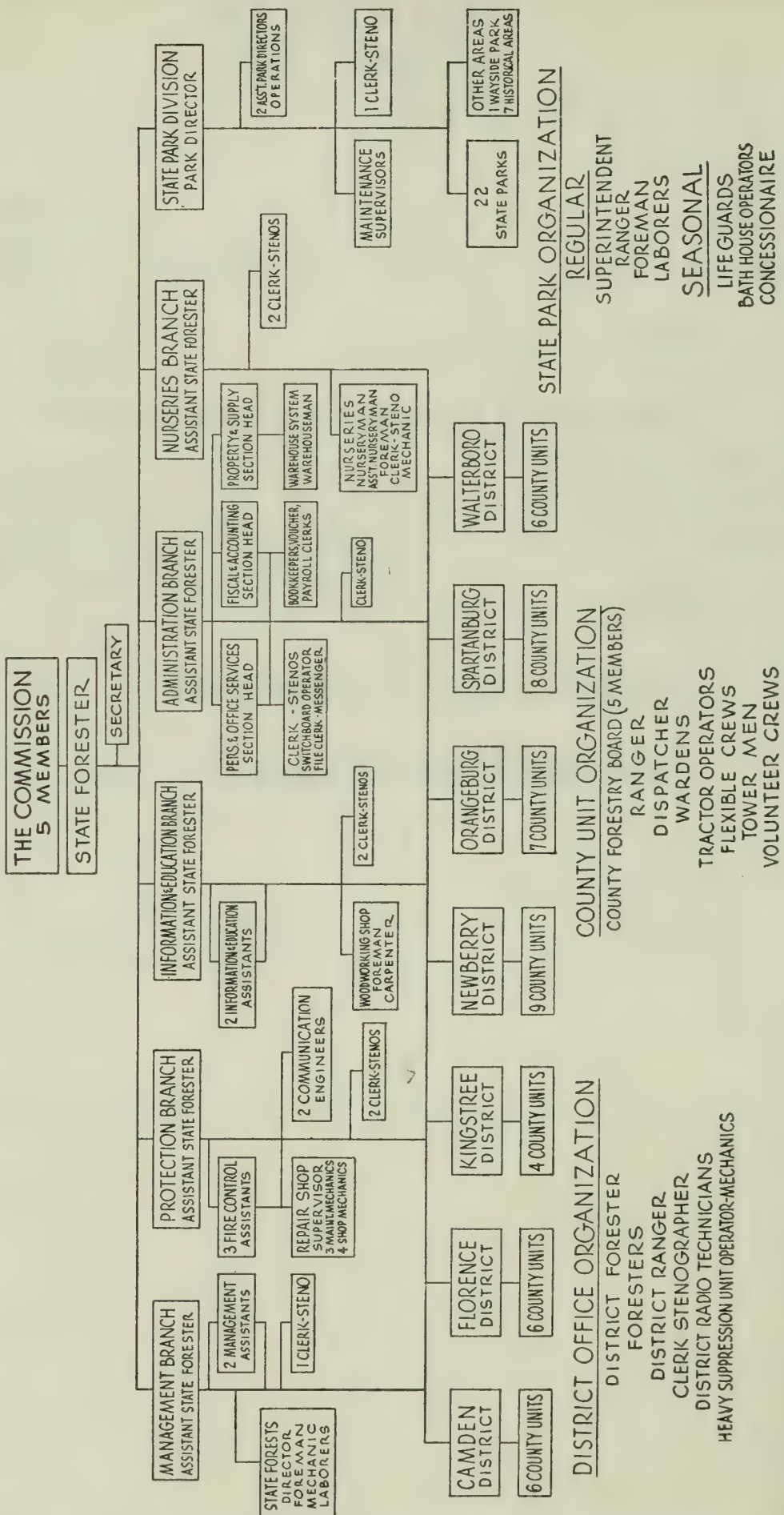
Assistant State Park Director	1
Superintendent	1
Ranger	1
Foreman	1
Laborers	2
	—
Total	6

Losses Due to Promotions or Change in Positions

Bookkeepers	2
Foreman	1
Caretaker	1
	—
Total	4
	—
Total Losses, Division of State Parks	10
	—
Grand Total—Personnel Losses	77

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

ORGANIZATION CHART



APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1960-June 30, 1961

RECEIPTS

Division of Forestry:

Balance from 1959-60—Radio Comm. Fund	\$ 841.45	
Balance from 1959-60—Forestry Comm.—Specials	28,382.05	
State Appropriation—Operating	1,795,880.00	
State Appropriation—Sanitary Facilities for Tower Dwellings	60,000.00	
Forestry Commission—Specials—C-M Law, Sec. 2	297,200.00	
Forestry Commission—Specials—Cooperative Farm Management	37,480.00	
Forestry Commission—Specials—Watershed Projects	22,152.19	
Forestry Commission—Specials—Agricultural Stabilization	22,047.20	
Forestry Commission—Specials—Conservation Program	21,000.00	
Counties & Timber Firms	15,837.57	
State Forest (S.O.E.P.)	240,185.96	
Sale of Property (Sumter Warehouse)	19,800.00	
Nurseries	462,370.99	
Marking & Tallying Timber	8,542.98	
Radio Communications	102.50	
		<hr/>
Total Receipts—Forestry		\$3,031,822.89
Less Receipts Deposited to Cr. of State Revenue Account		485,713.15
		<hr/>
Total Receipts Available for Expenditure		2,546,109.74
Total Expenditures		2,541,870.58
		<hr/>
Balance—Division of Forestry		4,239.16*

Division of State Parks:

Balance from 1959-60 Forests & Parks—Beach Village	2,593.36
Balance from 1959-60 Forests & Parks—Santee Landing	1,107.26
Balance from 1959-60 Forests & Parks—Timber Sale	116,323.53
Balance from 1959-60 Parks Improvements	15,038.76
Balance from 1959-60 Myrtle Beach Fishing Pier	1,154.44
Balance from 1959-60 Myrtle Beach Swimming Pool	117.00
State Appropriation—Operating	369,746.00
State Appropriation—Historical Areas	11,561.00
State Appropriation—Historical Specials—Rose Hill	35,000.00
State Appropriation—Historical Specials—Fort Dorchester	5,000.00
State Appropriation—Huntington Beach—Special Appropriation	35,000.00
Parks Improvement Fund—(Sale of Little Croft)	20,000.00

Forests & Parks Fund—Hunting Island Deposits	1,948.06	
Forests & Parks Fund—Santee Boat Landing	2,176.11	
Forests & Parks Fund—Givhans Ferry Park (Sale of Land)	500.00	
Myrtle Beach Fishing Pier	34,866.04	
Myrtle Beach Swimming Pool	10,182.42	
Cabin Rentals	27,263.61	
Concession Stands	2,422.29	
Bathhouse & Swimming	44,283.42	
Boat Rentals	3,222.37	
Picnic Shelters, Recreation Bldgs., & Trailer Camps	26,362.95	
Group Camps	13,418.42	
Miscellaneous	3,916.49	
		<hr/>
Total Receipts—Parks		783,203.53
Less Receipts Deposited to Cr. of State Revenue Account		120,889.55
		<hr/>
Total Park Receipts Available for Expenditures		662,313.98
Total Parks Expenditures		535,105.88
		<hr/>
Balance—Division of State Parks		127,208.10†

EXPENDITURES

Administrative & Technical	586,753.22	
State Forestry Nurseries	408,764.47	
State Forests Projects	294,134.47	
Fire Protection	1,228,922.56	
Chesterfield, Richland and Sumter Counties —25%		
Receipts from State Forests	21,372.90	
Refund of overpayment to Treasurer of U. S.	1,922.96	
		<hr/>
Total—Division of Forestry		2,541,870.58
Total—Division of State Parks		535,105.88
		<hr/>
GRAND TOTAL—Expenditures		3,076,976.46

RECAPITULATION

Funds Available:

Division of Forestry	2,546,109.74
Division of State Parks	662,313.98

 3,208,423.72

Expenditures:

Division of Forestry	2,541,870.58
Division of State Parks	535,105.88

 3,076,976.46

Balance

131,447.26*†

*Forestry: Forestry Commission—

Specials\$ 4,145.21

Radio Communications - 93.95

†Parks: Forests & Parks Fund 35,729.83

Parks Improvements 35,038.76

M. B. Fishing Pier 3,686.88

M. B. Swimming Pool 2,752.63

Fort Dorchester—Special 5,000.00

Huntington Beach—

Special 35,000.00

Rose Hill Plantation—

Caretaker & Maintenance

..... 10,000.00

 \$131,447.26

TABLE 1—PROTECTION PERSONNEL—FISCAL YEAR 1960-61

UNIT	Organized Personnel					Volunteer Personnel	GRAND TOTAL
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	149	154
Aiken	1	4	2	5	12	496	508
Allendale	1	2	1	3	7	78	85
Anderson	1	2	1	3	7	180	187
Bamberg	1	2	1	2	6	322	328
Barnwell	1	2	2	2	7	221	228
Beaufort	1	3	2	4	10	147	157
Berkeley	1	4	2	4	11	723	734
Calhoun	1	2	1	2	6	49	55
Charleston	1	4	3	3	11	528	539
Cherokee	1	1	1	1	4	134	138
Chester	1	3	1	1	6	125	131
Chesterfield	1	3	1	4	9	85	94
Clarendon	1	3	2	3	9	554	563
Colleton	1	4	3	5	13	728	741
Darlington	1	2		3	6	423	429
Dillon	1	2	1	2	6	218	224
Dorchester	1	4	2	3	10	213	223
Edgefield	1	2	1	1	5	118	123
Fairfield	1	4	1	3	9	213	222
Florence	1	4	2	4	11	696	707
Georgetown	1	4	2	4	11	645	656
Greenville	1	3	1	4	9	506	515
Greenwood	1	2	1	2	6	122	128
Hampton	1	3	1	3	8	213	221
Horry	1	5	2	4	12	709	721
Jasper	1	3	2	2	8	352	360
Kershaw	1	3	2	6	12	329	341
Lancaster	1	3	1	2	7	241	248
Laurens	1	3	1	2	7	237	244
Lee	1	2	1	3	7	225	232
Lexington	1	3	2	5	11	340	351
McCormick	1	1	1	1	4	76	80
Marion	1	3	2	3	9	403	412
Marlboro	1	3	2	3	9	519	528
Newberry	1	2	1	2	6	111	117
Oconee	1	2	1	3	7	94	101
Orangeburg	1	5	3	5	14	993	1,007
Pickens	1	3	1	4	9	80	89
Richland	1	5	2	4	12	400	412
Saluda	1	2	1	1	5	68	73
Spartanburg	1	3	1	4	9	100	109
Sumter	1	3	2	3	9	650	659
Union	1	2	1	1	5	70	75
Williamsburg	1	5	2	4	12	1,779	1,791
York	1	2	1	4	8	215	223
TOTALS	46	134	68	138	386	15,877	16,263

TABLE 2—SUMMARY OF FIRES BY MONTHS—JULY 1, 1960—JUNE 30, 1961

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July	70	1.5	429.3	6.1
August	44	0.9	132.9	3.0
September	36	0.8	317.3	8.8
October	41	0.9	75.5	1.8
November	244	5.1	1,433.9	5.9
December	992	20.8	9,262.3	9.3
January	1,137	23.8	14,799.0	13.0
February	684	14.3	10,261.9	15.0
March	1,046	21.9	18,422.7	17.6
April	327	6.8	3,968.6	12.1
May	68	1.4	531.2	7.8
June	87	1.8	335.2	3.9
TOTALS	4,776	100.0	59,969.8	12.6

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1960-61

UNIT	Lightning		Railroads		Campers		Smokers		Debris Burning		Incendiary		Lumbering		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	..	..	5	45.5	3	16.8	9	42.9	4	12.8	3	1.0	..	..	2	2.9	26	121.9
Aiken	4	30.1	..	..	6	56.2	44	239.8	35	317.1	11	26.9	..	5.8	37	184.7	139	860.6
Allendale	..	..	1	3.0	1	1.6	9	38.1	11	146.2	12	261.9	1	0.1	4	26.0	39	476.9
Anderson	..	..	..	..	..	..	23	77.4	29	115.4	6	31.0	..	..	3	4.0	61	227.8
Bamberg	..	..	..	..	1	4.0	13	137.9	17	584.0	22	337.8	1	2.0	4	18.5	58	1,084.2
Barnwell	..	..	..	..	1	3.2	22	255.1	29	171.6	11	44.4	2	115.0	4	6.8	69	596.1
Beaufort	3	6.3	..	..	7	18.2	9	86.5	15	236.6	24	432.2	..	..	1	2.0	59	781.8
Berkeley	..	..	3	8.0	2	79.0	127	1,935.5	53	844.0	153	2,343.3	..	..	..	..	338	5,209.8
Calhoun	..	..	..	..	..	..	10	65.8	1	2.1	7	43.7	..	..	..	..	18	111.6
Charleston	..	..	1	1.8	25	157.3	103	500.6	25	226.6	25	137.2	1	33.0	14	45.8	194	1,102.3
Cherokee	..	..	3	38.9	..	..	11	57.5	3	16.0	3	10.2	..	..	2	5.5	22	128.1
Chester	..	..	6	39.9	2	59.0	9	62.9	7	21.4	1	12.0	..	..	6	40.0	31	235.2
Chesterfield	1	3.0	2	154.5	..	..	7	31.8	12	175.2	12	90.8	1	6.3	3	5.5	40	472.4
Clarendon	..	..	15	134.5	15	104.3	124	1,719.5	52	1,550.0	57	774.8	1	8.0	14	342.7	263	4,529.5
Colleton	..	..	13	6.0	..	..	38	327.6	79	1,015.0	43	212.2	3	46.4	5	10.9	183	1,722.4
Darlington	..	..	3	22.9	..	..	55	405.4	38	679.2	2	6.1	1	16.0	10	12.8	113	1,184.4
Dillon	..	..	1	..	1	0.6	21	50.2	46	766.5	1	3.3	2	5.0	7	15.7	78	841.3
Dorchester	..	..	2	6.0	8	51.0	67	790.6	56	679.7	8	240.0	..	..	10	39.8	151	1,807.1
Edgefield	3	29.1	..	..	..	..	6	14.0	9	42.3	..	..	2	4.1	5	12.0	25	101.5
Fairfield	2	8.0	9	195.1	2	15.0	20	131.8	1	22.0	3	38.5	2	10.4	4	18.5	43	439.3
Florence	..	..	..	..	1	0.4	51	415.9	96	973.3	88	1,044.5	2	4.8	17	35.1	255	2,474.0
Georgetown	3	242.0	1	10.0	4	216.0	65	853.3	35	349.4	57	759.7	1	8.0	4	20.3	170	2,458.7
Greenville	..	..	..	..	3	15.9	54	80.9	39	66.0	8	15.4	1	2.5	31	124.4	136	305.1
Greenwood	..	..	..	..	1	0.4	10	38.0	8	11.4	2	4.0	..	..	6	16.5	27	70.3
Hampton	1	34.0	2	6.4	..	..	56	699.9	24	186.2	7	3.3	2	264.0	5	23.5	97	1,217.3
Horry	1	1.0	1	0.5	3	5.0	44	284.9	69	667.6	49	1,740.3	8	50.9	27	168.3	202	2,918.5
Jasper	..	..	5	12.0	4	68.5	23	205.3	28	570.9	61	1,331.8	1	1.0	1	0.5	123	2,190.0
Kershaw	5	18.7	5	80.0	..	..	25	124.8	17	224.1	5	31.0	4	10.0	15	35.8	76	524.4
Lancaster	..	..	1	10.0	1	..	17	81.5	7	95.2	2	41.0	1	6.4	6	23.9	34	239.1
Laurens	..	..	4	50.2	..	..	18	57.9	9	32.7	..	..	5	12.0	12	38.9	43	179.7
Lee	1	4.0	..	..	1	20.0	22	87.4	17	180.4	7	96.2	..	..	3	32.1	56	432.1
Lexington	5	13.2	5	5.2	..	..	27	95.1	29	107.9	4	5.9	1	8.0	12	28.0	82	255.3
Marion	..	..	..	..	2	16.8	11	24.9	24	70.0	11	34.6	..	..	3	0.6	52	154.9
Marlboro	..	..	7	45.1	7	24.4	35	450.1	52	550.0	18	766.9	1	5.0	8	34.2	128	1,875.7
McCormick	1	2.4	5	88.9	..	..	5	8.7	..	..	..	..	..	..	2	0.4	13	100.4
Newberry	4	3.1	..	..	..	..	3	6.2	4	6.3	..	..	1	1.2	5	8.8	17	25.6

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1960-61

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL NO.
Abbeville	3	19	4	....	....	26
Aiken	7	106	26	....	....	139
Allendale	3	27	8	1	....	39
Anderson	3	54	4	....	....	61
Bamberg	5	38	12	3	....	58
Barnwell	3	57	8	1	....	69
Beaufort	1	43	13	2	....	59
Berkeley	9	212	112	5	....	338
Calhoun	2	12	4	....	....	18
Charleston	19	150	25	....	....	194
Cherokee .....	....	20	2	....	....	22
Chester .....	....	25	6	....	....	31
Chesterfield	6	24	9	1	....	40
Clarendon	20	172	62	8	1	263
Colleton	14	132	36	1	....	183
Darlington	11	80	21	1	....	113
Dillon	13	60	3	2	....	78
Dorchester	37	84	29	1	....	151
Edgefield	2	20	3	....	....	25
Fairfield .....	....	29	13	1	....	43
Florence	25	171	51	8	....	255
Georgetown	12	109	46	3	....	170
Greenville	39	94	3	....	....	136
Greenwood	5	21	1	....	....	27
Hampton	6	64	24	3	....	97
Horry	16	135	48	2	1	202
Jasper	4	73	43	3	....	123
Kershaw	3	62	10	1	....	76
Lancaster	5	22	7	....	....	34
Laurens	5	34	4	....	....	43
Lee	1	45	10	....	....	56
Lexington	11	69	2	....	....	82
Marion	11	37	4	....	....	52
Marlboro	21	88	15	3	1	128
McCormick	3	9	1	....	....	13
Newberry	3	14	....	....	....	17
Oconee	18	23	2	....	....	43
Orangeburg .....	....	196	134	8	2	340
Pickens	2	24	1	....	....	27
Richland	13	114	48	1	1	177
Saluda	3	13	....	....	....	16
Spartanburg .....	....	34	4	....	....	38
Sumter	15	139	43	1	....	198
Union	5	27	2	....	....	34
Williamsburg	90	160	115	22	1	388
York	8	39	7	....	....	54
TOTALS	482	3,180	1,025	82	7	4,776

UNIT	Dec. 1960		Nov. 1960		Oct. 1960		Sept. 1960		Aug. 1960		July 1961		June 1961											
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres										
Abbeville	5	12.7	4	22.1	3	3.0	4	3.8	5	2.6	8	24.1	4	36.7	4	37.6	2	13.6	3	7.3	11	191.3	4	41.9
Aiken	3	5.2	1	8.4	5	8.4	5	9.0	11	53.3	28	126.0	18	36.9	14	56.7	37	312.9	11	7.3	1	8.0	1	15.0
Allendale	2	3.2	1	3.3	5	13.2	1	5.2	1	3.3	18	67.9	7	38.5	12	54.9	7	16.4	10	28.5	3	13.2	2	4.2
Bamberg	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Barnwell	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Beaufort	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Berkeley	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Calhoun	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Charleston	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Cherokee	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Chester	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Chesterfield	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Clarendon	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Colleton	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Darlington	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Dillon	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Dorchester	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Edgefield	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Fairfield	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Florence	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Georgetown	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Greenville	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Greenwood	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Hampton	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Horry	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Jasper	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Kershaw	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Lancaster	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Laurens	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Lee	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Lexington	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Marion	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Marlboro	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
McCormick	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Newberry	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Orangeburg	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Pickens	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Richland	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Saluda	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Spartanburg	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Sumter	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Union	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
Williamsburg	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
York	2	6.0	1	3.3	5	13.2	1	5.2	1	3.3	18	84.0	29	187.8	10	149.0	20	590.2	1	140.0	1	28.5	1	2.2
TOTALS	70	429.3	44	132.9	36	317.3	41	75.5	244	1,433.9	992	9,262.3	1,137	14,799.0	684	10,261.9	1,046	18,422.7	327	3,968.6	68	531.2	87	335.2

TABLE 6—CLASSIFICATION BY CAUSES—FISCAL YEAR 1960-61

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	38	.8	397.6	10.5
Railroads	103	2.2	1,021.8	9.9
Campers	143	3.0	1,481.1	10.4
Smokers	1,568	32.8	15,212.7	9.7
Debris Burning	1,351	28.3	17,076.8	12.6
Incendiary	1,136	23.8	21,113.0	18.6
Lumbering	68	1.4	1,314.3	19.3
Miscellaneous	369	7.7	2,352.5	6.4
TOTALS	4,776	100.0	59,969.8	12.6

TABLE 7—CAUSES OF FIRES—FIVE-YEAR-PERIOD
(Per Cent of Total)

CAUSES	1956-57	1957-58	1958-59	1959-60	1960-61	Average For 5-Year Period
Lightning	1.7	1.1	0.4	1.4	.8	1.0
Railroads	2.3	2.6	3.3	4.0	2.2	2.9
Campers	2.7	3.1	2.7	2.2	3.0	2.7
Smokers	26.0	27.0	33.0	32.2	32.8	30.2
Debris Burning	21.9	20.1	29.8	30.8	28.3	26.2
Incendiary	35.3	34.7	19.2	19.8	23.8	26.6
Lumbering	2.4	2.1	2.0	1.6	1.4	1.9
Miscellaneous	7.7	9.3	9.6	8.0	7.7	8.5

TABLE 3—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA—FISCAL YEAR 1960-61

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
Abbeville	167,647	26	121.9	.07	4.7
Aiken	401,376	139	860.6	.21	6.2
Allendale	131,400	39	476.9	.36	12.2
Anderson	173,700	61	227.8	.13	3.7
Bamberg	126,000	58	1,084.2	.86	18.7
Barnwell	74,565	69	596.1	.80	8.6
Beaufort	165,000	59	781.8	.47	13.3
Berkeley	399,091	338	5,209.8	1.31	15.4
Calhoun	123,500	18	111.6	.09	6.2
Charleston	271,114	194	1,102.3	.41	5.7
Cherokee	127,800	22	128.1	.10	5.8
Chester	260,023	31	235.2	.09	7.6
Chesterfield	310,000	40	472.4	.15	11.8
Clarendon	228,500	263	4,529.5	1.98	17.2
Colleton	465,000	183	1,722.4	.37	9.4
Darlington	208,500	113	1,184.4	.57	10.5
Dillon	144,100	78	841.3	.58	10.8
Dorchester	268,200	151	1,807.1	.67	12.0
Edgefield	172,363	25	101.5	.06	4.1
Fairfield	338,957	43	439.3	.13	10.2
Florence	293,900	255	2,474.0	.84	9.7
Georgetown	415,600	170	2,458.7	.59	14.5
Greenville	267,800	136	305.1	.11	2.2
Greenwood	198,963	27	70.3	.04	2.6
Hampton	239,500	97	1,217.3	.51	12.5
Horry	557,600	202	2,918.5	.52	14.4
Jasper	303,400	123	2,190.0	.72	17.8
Kershaw	336,500	76	524.4	.16	6.9
Lancaster	199,400	34	239.1	.12	7.0
Laurens	244,621	43	179.7	.07	4.2
Lee	110,600	56	432.1	.39	7.7
Lexington	291,500	82	255.3	.09	3.1
Marion	224,700	52	154.9	.07	3.0
Marlboro	150,600	128	1,875.7	1.25	14.7
McCormick	144,859	13	100.4	.07	7.7
Newberry	204,949	17	25.6	.01	1.5
Oconee	257,632	43	120.8	.05	2.8
Orangeburg	318,800	340	7,708.8	2.42	22.7
Pickens	190,100	27	107.2	.06	4.0
Richland	289,500	177	2,565.6	.89	14.5
Saluda	149,946	16	28.9	.02	1.8
Spartanburg	208,300	38	193.7	.09	5.1
Sumter	205,400	198	2,202.8	1.07	11.1
Union	157,894	34	165.6	.10	4.9
Williamsburg	429,800	388	9,140.8	2.13	23.6
York	226,300	54	280.3	.12	5.2
TOTALS	11,175,000	4,776	59,969.8	.54	12.6

TABLE 9—FIVE-YEAR SUMMARY—FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1956-57	11,300,008	3,883	46,777.8	0.41	12.0
1957-58	11,300,008	2,590	20,253.0	0.18	7.8
1958-59	11,175,000	4,608	39,612.3	0.35	8.6
1959-60	11,175,000	2,958	29,785.8	0.27	10.1
1960-61	11,175,000	4,776	59,969.8	0.54	12.6
Five-Year Average	11,225,003	3,763	39,279.7	0.35	10.2

TABLE 10—S. C. STATE COMMISSION OF FORESTRY 1960-61 SEEDLING DISTRIBUTION
BY LAND CLASSIFICATION

Land Ownership	Trees Planted
Farmers	115,431,850
Other Individuals	10,077,210
Associations and Clubs	530,200
Lumber Companies	1,184,000
Pulp and Paper Companies	8,663,000
Other Industries	6,222,000
Schools	320,965
State Forests	1,778,000
Other State Lands.....	257,850
Cities, Towns, Counties	283,000
Federal Government	861,000
TOTAL	145,609,075

In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

Catawba Timber Company.....	1,987,000
West Virginia Pulp and Paper Company.....	4,797,500
Lightsey Brothers	982,500
Canal Wood Corp.	400,000
Continental Can Company.....	3,055,000
Timberland Management Company.....	1,150,000
Union Bag-Camp Paper Company.....	330,000
International Paper Company.....	19,500
Totals	12,721,500

Grand Total, trees planted in S. C. 1960-61..... 158,330,575

In addition to the above tree plantings, a total of 3,787 acres were direct seeded to pine during the fiscal year.

TABLE 11—S. C. STATE COMMISSION OF FORESTRY 1960-61 SEEDLING DISTRIBUTION
BY COUNTY AND SPECIES

COUNTY AND DISTRICT	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red Cedar	Yellow Poplar	Misc. Species	Total	Soil Bank	Other
Chesterfield	613,500	10,676,300	309,000	1,000	2,000	5,000	...	11,606,800	7,703,500	3,903,300
Kershaw	1,576,000	13,004,000	2,000	4,000	500	2,000	...	14,588,500	7,127,500	7,461,000
Lancaster	1,493,900	863,700	3,500	...	...	6,000	...	2,367,100	1,145,700	1,221,400
Lee	266,000	2,207,700	12,000	1,000	...	...	...	2,486,700	1,851,000	635,700
Richland	1,485,060	2,315,550	31,000	14,485	1,000	135	210	3,847,440	1,671,500	2,175,940
Sumter	1,537,800	3,072,400	9,000	2,000	...	...	...	4,621,200	2,904,200	1,717,000
TOTAL—Camden District	6,972,260	32,139,650	366,500	22,485	3,500	13,135	210	39,517,740	22,403,400	17,114,340
Darlington	288,500	2,452,900	36,000	500	500	...	...	2,778,400	1,715,900	1,062,500
Dillon	113,000	544,000	20,000	2,000	1,500	3,000	...	683,500	214,500	469,000
Florence	197,650	485,600	18,500	3,000	...	...	...	704,750	263,500	441,250
Horry	446,500	1,248,000	1,000	5,000	5,000	...	...	1,705,500	216,500	1,489,000
Marion	367,100	485,000	12,000	1,000	...	...	...	865,100	33,000	832,100
Marlboro	275,000	3,186,700	12,500	...	...	...	...	3,474,200	2,294,100	1,180,100
TOTAL—Florence District	1,687,750	8,402,200	100,000	11,500	7,000	3,000	...	10,211,450	4,737,500	5,473,950
Berkeley	256,000	447,500	1,000	1,000	...	...	...	705,500	126,000	579,500
Clarendon	483,100	895,000	62,000	...	1,000	...	...	1,441,100	1,006,000	435,100
Georgetown	265,000	464,400	...	...	...	2,000	...	731,400	30,000	701,400
Williamsburg	330,000	500,000	7,500	...	5,500	...	...	843,000	251,500	591,500
TOTAL—Kingsree District	1,334,100	2,306,900	70,500	1,000	6,500	2,000	...	3,721,000	1,413,500	2,307,500
Abbeville	219,100	805,000	3,500	4,750	4,000	200	...	1,036,550	207,000	829,550
Chester	2,433,000	55,000	1,000	1,500	1,000	1,000	...	2,492,500	318,000	2,174,500
Edgefield	1,805,000	142,500	...	...	...	...	...	1,947,500	874,000	1,073,500
Fairfield	3,943,000	24,000	3,000	600	1,000	3,000	5,000	3,979,600	1,529,000	2,450,600
Greenwood	1,848,300	23,000	1,500	14,500	1,750	...	...	1,889,050	368,800	1,520,250
Laurens	2,663,700	2,000	1,000	7,850	300	...	...	2,674,850	861,500	1,813,350
McCormick	1,171,500	3,000	1,500	...	...	3,000	...	1,179,000	291,000	888,000
Newberry	1,289,600	17,000	2,000	26,550	...	6,000	...	1,341,150	330,600	1,010,550
Saluda	983,750	265,000	...	...	...	...	...	1,248,750	1,061,500	187,250
TOTAL—Newberry District	16,356,950	1,336,500	13,500	55,750	8,050	13,200	5,000	17,738,950	5,841,400	11,947,550
Aiken	463,000	10,827,500	70,000	6,100	15,000	500	100	11,382,200	4,174,000	7,208,200

Allendale	363,000	5,485,500	30,000	1,000	5,000	5,884,500	3,700,500	2,184,000
Bamberg	278,000	5,041,000	8,000	500	5,000	5,333,800	4,327,500	1,006,300
Barnwell	246,500	6,509,500	90,000	5,500	5,500	6,857,000	4,738,500	2,118,500
Calhoun	252,500	1,988,700	24,000	1,000	3,875	2,270,075	1,214,200	1,055,875
Lexington	260,500	5,750,500	61,000	1,000	10,500	6,083,500	1,873,500	4,210,000
Orangeburg	1,173,000	9,412,000	85,500	4,800	8,000	10,687,800	6,851,900	3,835,900
TOTAL—Orangeburg District	3,036,500	45,014,700	368,500	14,200	27,875	48,498,875	26,880,100	21,618,775
Anderson	2,066,700	104,000	4,650	550	3,500	2,210,025	777,220	1,432,805
Cherokee	975,000	2,000	12,000	2,000	31,000	1,046,500	206,500	840,000
Greenville	1,657,500	62,100	4,500	100,725	8,950	1,836,775	688,000	1,148,775
Oconee	1,324,600	23,000	1,100	39,000	6,800	1,488,540	370,000	1,118,540
Pickens	1,152,100	5,000	5,000	78,750	5,725	1,254,075	389,000	865,075
Spartanburg	3,038,750	7,500	5,500	63,550	4,500	3,130,800	1,439,000	1,691,800
Union	1,349,000	5,000	1,000	1,000	6,500	1,361,500	458,500	903,000
York	2,163,200	35,200	.....	1,000	19,500	2,219,400	688,500	1,530,900
TOTAL—Spartanburg District	13,726,850	243,800	33,750	338,100	86,475	14,547,615	5,016,720	9,530,895
Beaufort	80,000	935,000	.....	500	.....	1,035,500	686,000	349,500
Charleston	55,025	546,000	1,025	1,025	1,025	606,150	112,400	493,750
Colleton	895,500	4,259,200	4,000	13,500	.....	5,172,200	2,859,700	2,312,500
Dorchester	39,000	943,600	.....	1,500	.....	987,600	601,600	386,000
Hampton	270,000	2,179,500	1,000	1,000	6,000	2,458,500	1,470,500	988,000
Jasper	166,000	892,800	.....	.....	.....	1,058,800	273,800	785,000
TOTAL—Walterboro District	1,505,525	9,776,100	6,025	17,025	7,025	11,318,750	6,004,000	5,314,750
Experimental	265	200	200	3,615	200	4,695	.....	4,695
STATE TOTAL	44,620,200	99,220,050	958,975	463,675	152,910	145,609,075	72,296,620	73,312,455

* Water Oak	.....450	White Oak	.....400	Magnolia	.....20
Sweet Gum	.....410	Chestnut Oak	.....400	Ariz. Cyp.	.....260
Bald Cyp.	.....400	Bl. Walnut	.....3,440	Shortleaf	.....99,810

TABLE 12—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

COUNTY	Seedlings Planted 1929-1960	Seedlings Planted 1960-1961	Grand Total Planted To Date	Acres Planted Through June 30, 1961	Acres Needing Planting as of June 30, 1961
Abbeville	16,483,938	1,331,050	17,814,988	17,815	134,929
Aiken	100,513,369	11,690,200	112,203,569	112,204	259,463
Allendale	31,508,095	6,252,500	37,760,595	37,761	45,311
Anderson	23,729,647	2,363,025	26,092,672	26,093	195,079
Bamberg	18,127,350	5,604,800	23,732,150	23,732	40,858
Barnwell	60,662,980	7,423,000	68,085,980	68,086	68,447
Beaufort	5,369,845	1,055,500	6,425,345	6,425	55,643
Berkeley	24,667,335	1,590,200	26,257,535	26,258	109,936
Calhoun	10,528,950	2,270,075	12,799,025	12,799	48,676
Charleston	4,574,440	652,150	5,226,590	5,227	68,929
Cherokee	9,098,541	1,688,500	10,787,041	10,787	126,309
Chester	17,290,400	2,580,500	19,870,900	19,871	151,869
Chesterfield	37,085,550	11,802,800	48,888,350	48,888	181,777
Clarendon	15,235,015	1,441,100	16,676,115	16,676	29,928
Colleton	27,559,880	6,961,600	34,521,480	34,521	115,088
Darlington	9,088,520	2,778,400	11,866,920	11,867	70,558
Dillon	5,349,455	758,500	6,107,955	6,108	33,006
Dorchester	19,971,680	1,963,600	21,935,280	21,935	83,605
Edgefield	12,094,538	1,980,000	14,074,538	14,075	56,530
Fairfield	14,677,779	3,993,600	18,671,379	18,671	133,029
Florence	4,988,268	704,750	5,693,018	5,693	53,902
Georgetown	14,577,300	1,311,400	15,888,700	15,889	94,060
Greenville	11,959,979	1,836,775	13,796,754	13,797	206,880
Greenwood	15,267,622	1,896,550	17,164,172	17,164	59,601
Hampton	27,337,465	2,781,900	30,119,365	30,119	85,399
Horry	15,049,400	1,845,000	16,894,400	16,894	144,281
Jasper	25,608,330	1,586,800	27,195,130	27,195	64,087
Kershaw	57,789,237	15,638,500	73,427,737	73,428	161,803
Lancaster	18,566,543	2,431,100	20,997,643	20,998	120,311
Laurens	28,152,409	3,497,850	31,650,259	31,650	146,169
Lee	6,388,855	2,814,700	9,203,555	9,204	62,238
Lexington	17,460,490	6,083,500	23,543,990	23,544	162,067
McCormick	6,705,325	1,190,000	7,895,325	7,895	81,050
Marion	5,507,445	865,100	6,372,545	6,373	16,391
Marlboro	14,250,630	3,699,200	17,949,830	17,950	15,807
Newberry	19,631,923	1,447,150	21,079,073	21,079	91,031
Oconee	10,579,585	1,488,540	12,068,125	12,068	242,808
Orangeburg	30,278,850	10,853,800	41,132,650	41,133	59,144
Pickens	11,899,980	1,254,075	13,154,055	13,154	185,891
Richland	23,413,528	4,293,440	27,706,968	27,707	130,740
Saluda	6,543,721	1,276,750	7,820,471	7,820	47,206
Spartanburg	21,704,299	3,262,800	24,967,099	24,967	206,683
Sumter	28,135,412	4,642,200	32,777,612	32,778	59,384
Union	15,994,274	1,736,500	17,730,774	17,731	136,271
Williamsburg	8,411,065	1,373,000	9,784,065	9,784	69,647
York	21,955,426	2,333,400	24,288,826	24,289	199,719
Experimental		4,695	4,695	5	
TOTALS	931,774,668	158,330,575	1,090,105,243	1,090,107	*4,911,540

* Information based on 1958 Forest Resources Survey of South Carolina corrected to June 1961.

STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1961 TO JUNE 30, 1962



CHARLES H. FLORY, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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*To Honorable Ernest F. Hollings, Governor, and to the General
Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual report upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1961 to June 30, 1962.

Respectfully submitted,

STATE COMMISSION of FORESTRY
Fulton B. Creech, *Chairman*.

PERSONNEL

S. C. STATE COMMISSION OF FORESTRY

(All personnel occupied position indicated as of June 30, 1962)

Members of the Commission

Fulton B. Creech, Chairman, Sumter

Dr. Robert C. Edwards, President, Clemson College, Clemson

C. H. Niederhof, Charleston

A. B. Taylor, Jr., Spartanburg

Robert R. Rigby, Jr., Columbia.

Secretary to the Commission

Chas. H. Flory, State Forester



The five man commission meets regularly to determine policies and initiate the programs of the Commission of Forestry. Shown above, left to right, are: Robert R. Rigby, C. H. Niederhof, Dr. Robert C. Edwards, Fulton B. Creech (Chairman), A. B. Taylor, Jr., and State Forester, Charles H. Flory (Secretary to the Commission).

DIVISION OF STATE PARKS

C. West Jacocks, State Park Director

E. R. Vreeland, Assistant State Park Director—Operations

F. Marion Dwight, Assistant State Park Director—Historical

State Park Superintendents

Aiken State Park, James B. Cothran, Windsor

Andrew Jackson Historical State Park, Cecil S. Hayes, Route
1, Lancaster

Barnwell State Park, Mrs. D. I. Ross, Blackville

*Cheraw State Park, George T. Holder, Cheraw

Chester State Park, Clarence Doster, Chester

Croft State Park, M. D. Camby, Pauline

Edisto Beach State Park, W. M. McDougal, Edisto Island

Givhans Ferry State Park, William Wiggins, Jr., Ridgeville

*Greenwood State Park, Keith M. Fleischmann, Ninety Six

*Hunting Island State Park, Van W. Pressley, Frogmore

Huntington Beach State Park, Norman B. Cooler, Pawleys
Island

Kings Mountain State Park, Raymond M. Sisk, Kings Creek

Lee State Park, Joe Frank Watson, Bishopville

Little Pee Dee State Park, LaFon Norton, Dillon

Myrtle Beach State Park, T. F. Barbie, Jr., Myrtle Beach

Oconee State Park, James W. Ray, Walhalla

Old Dorchester State Historical Site, H. C. Johnston, Summer-
ville

Paris Mountain State Park, Ed H. Miller, Greenville

*Pleasant Ridge State Park, LeRoy Smith, Cleveland

*Poinsett State Park, L. Storm Bailey, Wedgefield

Rivers Bridge State Park, E. B. Mobley, Ehrhardt

Rose Hill State Historical Site, Marvin Hyatt, Union

Santee State Park, G. B. LaBoon, Santee

Sesqui-Centennial State Park, Marshall D. Holder, Columbia

Table Rock State Park, Robert G. Jones, Pickens

Colleton Wayside Park, Willard Risher, Canadys

* Includes area for Negroes.

State Park Advisory Committee

J. D. Carroll
Lexington

Cecil D. McDaniel
Box 347
Beaufort

Wayne Freeman
Greenville News
Greenville

Harold A. Petit
S. C. Electric & Gas Co.
P. O. Box 952
Charleston

Harry R. E. Hampton
c/o The State Newspaper
Columbia

Thomas Moore Craig
Moore

Bennet Moore
Cheraw

Mrs. Bradley Morrah
212 Overbrook Rd.
Greenville

Mrs. Jack Bryant
Orangeburg

DIVISION OF FORESTRY

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John R. Tiller, Assistant State Forester
 Virginia S. Holmes, Fiscal-Personnel Assistant
 Delford F. Furney, Purchase-Property Assistant
 Warehouse, Sumter
 J. P. Watson, Warehouseman

Branch of Information and Education

Walter T. Ahearn, Assistant State Forester
 Nelson L. Peach, Information and Education Assistant
 Claude F. Barden, Information and Education Assistant
 Sign and Woodworking Shop, Sumter
 Olin M. Ballentine, Foreman

Branch of Forest Management

E. C. Pickens, Assistant State Forester
 Howard R. Scott, Management Assistant
 John E. Graham, Management Assistant
 E. L. Middleswart, Management Assistant
 C. R. Nichols, Jr., Management Assistant
 Sand Hills State Forest, Patrick
 Randolph B. Lee, Director
 Clyde C. Rice, Research Forester
 Joseph D. Mills, Forester
 Wm. H. Shannon, Forester
 Hugh T. Gore, Forester
 John K. Weyman, Forester
 Manchester State Forest, Wedgefield
 Robert N. McCombs, Director
 Horace L. Tilghman Nursery, Wedgefield
 L. M. Staley, Nurseryman
 Piedmont Nursery, Pickens
 E. W. Cooler, Jr., Nurseryman
 Coastal Nursery, St. George
 C. Hampton Durr, Nurseryman
 Ridge Nursery, Trenton
 David D. Brown, Nurseryman

Branch of Forest Fire Control

John M. Shirer, Assistant State Forester
 J. T. Hance, Fire Control Assistant
 W. M. Lindsey, Fire Control Assistant
 Hugh M. Westbury, Fire Control Assistant
 R. M. Littlejohn, Assistant, Fire Control Communications
 J. M. Geddings, Assistant, Fire Control Communications
 Equipment and Repair Shop, Sumter
 O. P. Woodward, Supervising Mechanic

District Offices

Paul B. Carson, Jr., District Forester, Camden
 Robert C. Simmons, Forester, Lancaster
 Daniel D. Riddick, Forester, Camden
 Roger L. Hagwood, Jr., Forester, Sumter
 C. C. Canada, Forester, Camden
 L. Hodge Harmon, Forester, Camden
 W. O. Morgan, District Ranger, Camden
 (Camden District includes counties of: Chesterfield, Kershaw,
 Lancaster, Lee, Richland, and Sumter)

Alvin E. Kunz, District Forester, Florence
 Chas. F. Moore, II, Forester, Florence
 Wray E. Freeman, Forester, Bennettsville
 John R. Allison, Forester, Conway
 Phil L. Hadaway, Forester, Florence
 Fred W. Watson, Jr., District Ranger, Florence
 (Florence District includes counties of: Darlington, Dillon,
 Florence, Horry, Marion and Marlboro)

Fred W. Horn, District Forester, Kingstree
 Donald W. Horton, Forester, Kingstree
 R. B. Rhett, Forester, Kingstree
 John R. Grubbs, District Ranger, Kingstree
 (Kingstree District includes counties of: Berkeley, Clarendon,
 Georgetown and Williamsburg)

J. Harlan McLees, District Forester, Newberry
 Wm. B. Lawrence, Forester, Newberry
 Joel I. Canada, Forester, Newberry
 Kenneth C. Clemens, Forester, Greenwood
 Clifton T. Carter, Timber Marker, Chester

Melton Wall, District Ranger, Newberry
 (Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

Marvin T. Gaffney, District Forester, Orangeburg
 Maurice C. Coleman, Forester, Orangeburg
 Henry G. Brown, Forester, Lexington
 E. G. Lambrecht, Forester, Orangeburg
 Albert P. Richardson, Forester, Orangeburg
 Robert E. Beach, Forester, Aiken
 Adrian Lee Pardue, District Ranger, Aiken
 (Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington and Orangeburg)

Wilbur H. Reames, District Forester, Spartanburg
 Ralph W. Evans, Forester, Pickens
 Robert J. Gould, Forester, Gaffney
 Legare M. Dukes, Forester, Spartanburg
 John W. Little, Forester, Walhalla
 C. W. Haynes, Forester, Pickens
 Chas. E. Turpin, District Ranger, Spartanburg
 (Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

C. C. Rountree, Jr., District Forester, Walterboro
 Jack F. Young, Forester, Walterboro
 Jas. H. Ryan, Jr., Forester, Walterboro
 Oscar R. Sampson, Forester, Walterboro
 E. H. Benton, District Ranger, Walterboro
 (Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton and Jasper)

Protection Units

Abbeville Unit Ranger, Charlie Shaw, Lowndesville
 Aiken Unit Ranger, J. Ramie Yonce, Aiken
 Allendale Unit Ranger, Vacancy, Allendale
 Anderson Unit Ranger, John E. Embler, Anderson
 Bamberg Unit Ranger, P. H. Cave, Olar
 Barnwell Unit Ranger, W. R. Moore, Barnwell
 Beaufort Unit Ranger, W. Heyward Graves, Beaufort
 Berkeley Unit Ranger, C. L. Wyndham, Moncks Corner

Calhoun Unit Ranger, Hampie F. Ott, St. Matthews
Charleston Unit Ranger, J. I. Garvin, Charleston
Cherokee Unit Ranger, B. T. White, Gaffney
Chester Unit Ranger, John S. Stone, III, Chester
Chesterfield Unit Ranger, W. M. Smith, Chesterfield
Clarendon Unit Ranger, Elliott E. Rose, Manning
Colleton Unit Ranger, Glenn B. Britt, Walterboro
Darlington Unit Ranger, Alton Yarborough, Darlington
Dillon Unit Ranger, Ernest S. Oliver, Dillon
Dorchester Unit Ranger, Cecil E. Kizer, St. George
Edgefield Unit Ranger, S. G. Reel, Edgefield
Fairfield Unit Ranger, R. E. Patrick, Winnsboro
Florence Unit Ranger, Hugh Cusaac, Florence
Georgetown Unit Ranger, Laurin T. Sessions, Georgetown
Greenville Unit Ranger, G. G. Paris, Greenville
Greenwood Unit Ranger, James C. Smith, Jr., Greenwood
Hampton Unit Ranger, Buddy Waldo Hiers, Varnville
Horry Unit Ranger, James T. Jones, Conway
Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland
Kershaw Unit Ranger, Chas. K. Young, Camden
Lancaster Unit Ranger, A. A. Plyler, Lancaster
Laurens Unit Ranger, Thos. F. Hill, Laurens
Lee Unit Ranger, E. A. Hall, Bishopville
Lexington Unit Ranger, V. S. Bickley, Lexington
Marion Unit Ranger, Hoyt Collins, Marion
Marlboro Unit Ranger, Jesse Adams, Jr., Bennettsville
McCormick Unit Ranger, G. L. Sharpton, McCormick
Newberry Unit Ranger, Marvin E. Wilson, Newberry
Oconee Unit Ranger, James D. Thrift, Walhalla
Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg
Pickens Unit Ranger, C. H. Gravely, Pickens
Richland Unit Ranger, T. W. Cooper, Columbia
Saluda Unit Ranger, Steve Shaw Rushton, Saluda
Spartanburg Unit Ranger, Milton E. McMillin, Spartanburg
Sumter Unit Ranger, L. G. Cabbage, Sumter
Union Unit Ranger, James G. Long, Union
Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree
York Unit Ranger, E. G. Foster, York

COUNTY FORESTRY BOARD MEMBERS**June 30, 1962****Abbeville—**

John C. Gilliam, Calhoun Falls
Reid Ashley, Rt. 2, Iva
W. L. Bowman, Rt. 3, Box 232, Iva
J. M. Kirkpatrick, RFD, Donalds
Sam W. Sherard, Rt. 3, Abbeville

Aiken—

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George Wilson, Bath
Grady McElmurray, Rt. 4, N. Augusta
J. C. Jones, Rt. 4, Aiken
George Townes, Jr., Aiken

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J. J. Snelling, Millett
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Harold Kearse, Olar
Jack C. Kirkland, Bamberg
Herbert Rhoad, Rt. 1, Branchville
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Chas. G. Youngblood, Box 114, Barnwell
 Ansel Still, Hilda
 W. E. Anderson, Box 393, Williston
 S. G. Lowe, Blackville
 Dean Rountree, Marlboro St., Barnwell

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 W. A. Campbell, Sheldon
 Charles Ulmer, Jr., Bluffton,
 Ernie Bell, Bluffton

Berkeley—

Algie H. Kennedy, Moncks Corner
 Charles Marion, Pineville
 Herbert Cross, Cross
 Herbert Caddell, Rt. 1, Bonneau
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Calhoun—

J. Mack Zeagler, Lone Star
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 Roger L. Hill, Gaston
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 W. Joe MacArthur, Gaffney
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 J. W. Sconyers, Summerton
 L. E. Brailsford, Summerton
 Douglas McFaddin, New Zion
 Dale Mercy, Manning

Colleton—

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 H. M. Kinsey, Walterboro
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 Leon Watkins, Hartsville
 Roland Warr, Rt. 3, Darlington
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 S. D. Williamson, Latta

H. N. Cousar, Latta
 James R. C. Calhoun, Dillon
 D. L. McInnis, Rt. 1, Little Rock

Dorchester—

Cecil Jordan, St. George
 Harry W. Pennington, Dorchester
 William Kizer, Rt. 1, St. George
 V. S. Varner, Ridgeville
 George L. Tupper, Rt. 1, Summerville

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 R. C. Bledsoe, Rt. 3, Edgefield
 Sam Slade, Edgefield
 H. Frank Cooper, Rt. 3, Augusta, Georgia
 Wm. D. Herlong, Johnston

Fairfield—

Reid Long, Blairs
 John McFadden, Ridgeway
 Marion Frazier, Blairs
 Henry Johnson, Winnsboro
 W. T. Glenn, Jenkinsville

Florence—

W. D. Boling, Pamplico
 Richard O. Bishop, Wentworth Dr., Florence
 F. H. Poston, Pamplico
 Jas. H. McElveen, Timmons ville
 Chas. E. Graham, Scranton

Georgetown—

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 J. T. Maynard, Georgetown
 Clarence L. Newton, Sr., Rt. 2, Box 57, Andrews
 Richard L. Allston, Pawleys Island
 H. H. Flickinger, Georgetown

Greenville—

M. L. Jarrard, Cleveland
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 S. B. Huff, Rt. 4, Piedmont
 G. Dewey Butler, Travelers Rest
 Ansel Alewine, Taylors

Greenwood—

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 John Bowen, Troy
 A. C. Byrd, c/o Abney Mills, Greenwood
 Fred P. Henderson, RFD, Ninety Six
 William K. Brown, RFD, Hodges

Hampton—

Sidney Linto, Box 191, Estill
 Vernon C. Sauls, Hampton
 R. C. DeLoach, Furman
 Howard P. Rhodes, Estill
 Lloyd Rivers, Hampton

Horry—

Hicks Huggins, Rt. 4, Nichols
 Lee Outlaw, Rt. 1, Myrtle Beach
 T. A. Smart, Rt. 2, Conway
 Allard Strickland, Rt. 1, Loris
 Darewood Strickland, Rt. 2, Tabor City, N. C.

Jasper—

J. Hoyt Langford, Ridgeland
 Wallace Goethe, Tillman
 J. Ivey Wells, Ridgeland
 George Roberts, Pineland
 B. J. Perry, Ridgeland

Kershaw—

Richard W. Lloyd, 1707 Lyttleton St., Camden
 Boyd Young, Westville

A. B. McLaurin, Bethune
 Bentley R. Stogsdill, Boykin
 C. W. Wooten, Blaney

Lancaster—

Frank Blackwell, Kershaw
 Harold Richardson, Rt. 1, Lancaster
 Carl W. Mullis, Lancaster
 W. G. Hance, Heath Springs
 Charlie V. Morris, Rt. 4, Box 150, Lancaster

Laurens—

Henry S. Orr, Box 417, Laurens
 J. Y. Martin, Ware Shoals
 J. T. Hollingsworth, Cross Hill
 Tan M. Ray, Clinton
 Elmore G. Bramlett, RFD, Laurens

Lee—

Grady Skinner, Rt. 2, Lamar
 Claude Berry, Rt. 4, Bishopville
 S. E. McElveen, Sr., Lynchburg
 M. E. Carter, Sr., Elliott
 Julian Rembert, RFD, Oswego

Lexington—

J. D. Carroll, Lexington
 Berley V. Shealy, Leesville
 L. O. Rast, Swansea

Marion—

T. C. Atkinson, Sr., Rt. 1, Mullins
 A. H. Turbeville, Mullins
 Marion J. Carter, Marion
 B. B. Baker, Centenary
 A. M. Flowers, Marion

Marlboro—

Brooks Usher, Bennettsville
 Colin McLaurin, Bennettsville
 R. M. Pegues, Rt. 4, Bennettsville
 C. D. Napier, Blenheim
 H. W. McDonald, McColl

McCormick—

G. J. Sanders, McCormick
 J. T. Creswell, Rt. 3, McCormick
 W. L. White, Rt. 2, McCormick
 J. C. Winn, Plum Branch
 Manly Willis, Rt. 1, McCormick

Newberry—

J. Cecil Berly, Pomaria
 Chas. C. Wallace, Rt. 3, Newberry
 H. M. Hentz, Box 181, Newberry
 A. W. Murray, Newberry
 T. J. Abrams, Whitmire

Oconee—

Oscar Wigington, Salem
 W. H. Pelfrey, Box 952, Seneca
 Henry Miller, Westminster
 B. W. Alexander, Rt. 3, Westminster

Orangeburg—

Martin Cope, Cope
 George H. Priester, Neeses
 J. Nat Miley, Branchville
 M. H. Whetsell, Orangeburg
 L. E. Miller, Holly Hill

Pickens—

T. A. Bowen, Pickens
 W. M. Ponder, Dacusville
 J. Edd Gilstrap, Dacusville
 J. H. Bolding, Rt. 2, Pickens
 Furman Chastain, c/o Poinsett Lbr. & Mfg. Co., Pickens

Richland—

J. M. Bates, Wateree
 Lonnie B. Nelson, Rt. 3, Columbia
 J. Roger Wilson, Blythewood
 E. B. Wingard, 3042 Broad River Rd., Columbia
 L. W. Conder, Box 693, Columbia

Saluda—

A. R. Able, Saluda
 M. H. Kemp, Johnston
 C. M. Forrest, Johnston
 J. Claude Wheeler, Saluda
 R. L. Hipp, Saluda

Spartanburg—

Tom Moore Craig, Montgomery Bldg., Spartanburg
 Paul Hendrix, Duncan
 W. J. Martin, 418 Lucerne Dr., Spartanburg
 Claude Bishop, Inman
 Warren Dillard, Cross Anchor

Sumter—

A. J. Hatfield, Sumter
 Hugh M. McLaurin, Jr., Wedgefield
 Curtis Edens, Dalzell
 N. R. Lester, Pinewood
 Albert Moore, Rt. 1, Olanta

Union—

Harold V. Bradley, Jr., Box 23, Union
 C. Lynell Gregory, Rt. 1, Buffalo
 Seth Garner, Rt. 4, Union
 James A. Berry, Union
 C. F. Miller, Rt. 3, Union

Williamsburg—

T. V. Ligon, Lanes
 W. W. McCullough, RFD, Hemingway
 E. Robert Rowell, Trio
 T. E. Salters, Salters
 Jack McFadden, Cades

York—

John M. Foster, York
 Oliver C. Faris, Catawba
 Sewell Hartness, Sharon
 Oscar Hammond, Fort Mill
 R. S. Flanagan, Bowling Green

FOREST MANAGEMENT

SUMMARY

The forest management program has remained at about the same level of operation for the past three years. The major emphasis of the Commission's management program was directed toward assisting small private owners in the management of their woodland properties. The lack of forest management on these properties remains the No. 1 forestry problem in South Carolina.

The 1959 Forest Survey shows 77 percent of South Carolina's woodland owned by small private landowners; public ownership equals 9 percent and industry ownership 14 percent.

Technical forest personnel of the State Commission of Forestry offer forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to improve the stand, maintain it in a productive condition, harvest timber products of any reforestation work necessary on idle or understocked areas. Also included are recommendations for protection from fire, insects and diseases.

During 1961-62 the Commission had a total of 24 men devoting full time to the forest management program, including the small watershed activities. These 24 men assisted 1,956 landowners with primary forest management plans and handled 2,193 requests for the Agricultural Stabilization Conservation Service. Four hundred nineteen field inspections of Conservation Reserve plantings were made. These men also marked 520 tracts covering 13,107 acres, amounting to 14,646,297 board feet and 11,123 cords. There were six active watershed projects on which critical area planting and gully control work was carried out.

The personnel were just able to keep up with requests from landowners for forest management assistance. In some areas requests could not be handled for six to eight weeks after being received. A minimum of four additional men is needed at present to increase this type service to private owners.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowners to employ a private consulting forester. Commission foresters also work closely with industry foresters who give direct assistance to landowners.

The Commission has followed the policy of recommending private consulting foresters to be employed by landowners wherever possible. It is believed that the large number of consulting foresters in South Carolina (49) is one of the primary reasons why South Carolina is one of the more progressive states in the nation in forest management. The Commission will continue its policy of encouraging the employment of consulting foresters on all properties where the cost to employ a consultant will be justified. Commission foresters will continue to concentrate their activities to promote interest among small landowners in doing better management work and in direct assistance to those small areas.

One hundred seventy-eight landowners were referred to consulting foresters and fifty-nine landowners were referred to industry foresters by Commission personnel.

Landowners continue to receive reasonably good prices for selectively marked sawtimber and pulpwood. The demand for all forest products was somewhat lower and prices were down as much as 30 percent in some areas for lower quality products. A more detailed report of this will be found later in this report.

The three-way agreement between Clemson College, the U. S. Forest Service and the Commission for insect and disease control was implemented in 1962. A working project was approved to undertake control action for Southern Pine Beetles (*Dendroctonus frontalis*). These beetles are present in epidemic numbers in the upper Piedmont section of the state. This effort is just under way and if the epidemic spreads, this problem could be extremely serious. An estimated 12 to 15 million board feet of timber was killed by this beetle during 1961-62.

Clemson College has continued its research efforts on forestry. The Commission is working with Clemson on a number of nursery and management research studies. Other projects will be undertaken in 1962-63.

There were six active small watershed projects operated during 1961-62. One new project, the Broadmouth Creek Area in Anderson County, was approved and work is now being done. The Commission of Forestry is responsible for all technical forestry work on these watershed areas, including tree planting on critically eroded areas.

Working agreements were completed with an additional number of the state's Soil Conservation Districts, bringing the total

to 36 agreements now signed. Only nine Soil Conservation Districts do not have a written agreement at present.

On March 2 an ice storm occurred in the Counties of Berkeley, Williamsburg, Georgetown, Colleton, Charleston, Dorchester and Hampton. Most damage occurred to trees 10" and less in diameter which resulted in the majority of the salvage job being pulpwood material. The State Forestry Commission sponsored a meeting of industry procurement personnel to attempt to work out a rapid salvage procedure. Considerable salvage was accomplished by June 30, 1962, and it is expected that non-salvageable material will not be substantial.

A close check has been made periodically to determine if insect activity is building up to epidemic proportions in the storm area. Through June there was no excessive build-up in the area.

The Management Branch added one man to its technical staff in the central office to assist with insect and disease control efforts and to work with training of county personnel on certain forest management activities. Approximately 40 Rangers have been given some training on non-fire jobs and a total of 1,709 hours worked by these men, including training time, on non-fire jobs. As the need arises and as rapidly as training can be given, these Rangers will assist more with the less technical work now being done by the field foresters.

As of June 30, there was a southern pine beetle epidemic affecting Oconee, Anderson, Pickens, Abbeville, Spartanburg and Union counties with relatively heavy infestation throughout the upper Piedmont counties. State Commission of Forestry personnel assisted personnel of the U. S. Forest Service and State Crop Pest Commission to make aerial surveys and ground checks for determining location and extent of the beetles. These field foresters are contacting all landowners upon whose land infestations are found and giving the landowners recommendations for control. Present control activities are not adequate and if present trends continue, thousands of dollars in damage will occur to pine timber stands in the Piedmont. Estimated losses as of June 30 exceed one million board feet per week.

The State Commission of Forestry continued to operate four state forests. The combined area of these state forests represents about one percent of the total forest area in the state. Experimental and demonstration plantings, forest management experi-

ments and other activities were continued on these forests. Since about 25 percent of the total land area in the state forests is still in an unproductive state, major emphasis continued to be directed toward reforesting this non-productive area. A total of 5,949 acres of scrub oak land was cleared during the year and has been, or will be, planted to pine.

The special program to speed up rehabilitation of unproductive scrub oak lands on the State Forests continued to make good progress. A total of 18,095 acres has been cleared and reforested since the program was authorized two years ago. All work has been accomplished with receipts from the state forests.

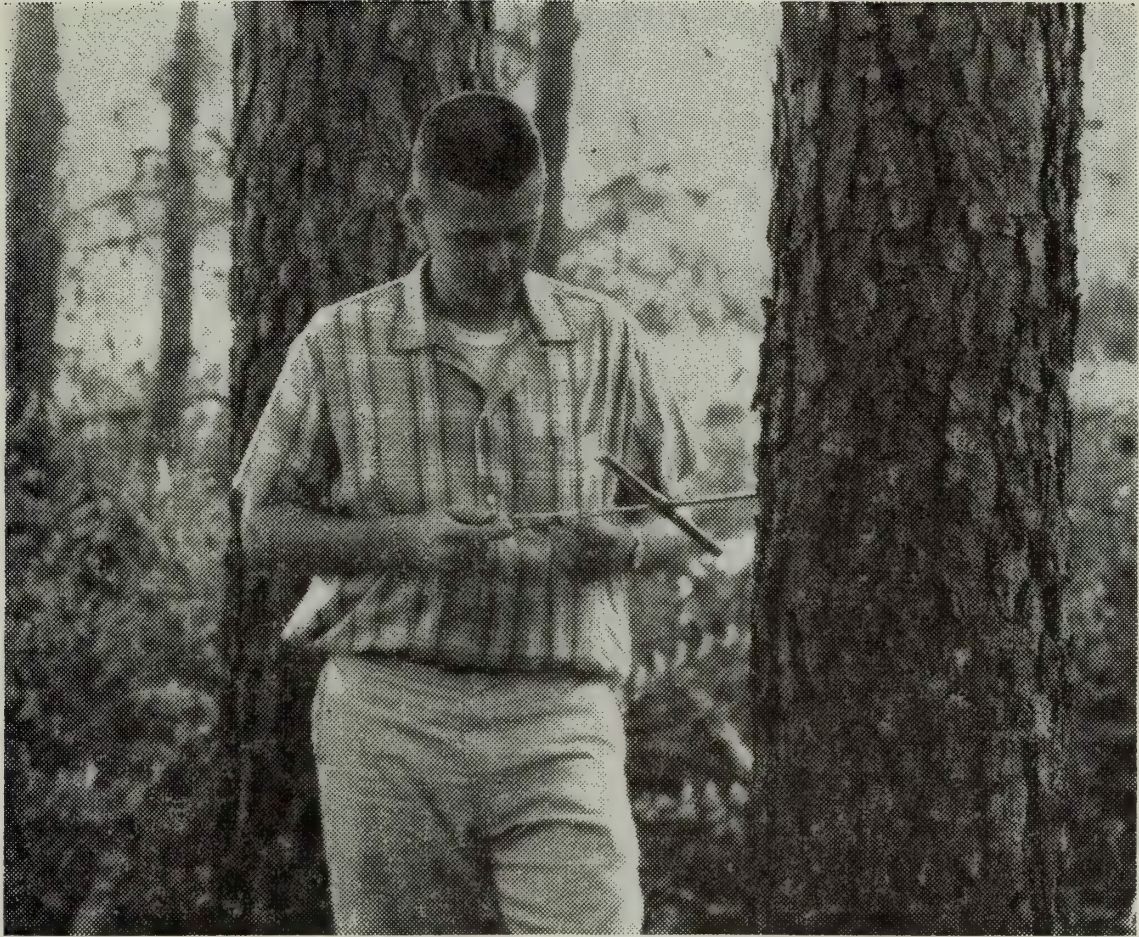
MANAGEMENT ASSISTANCE

The 24 man years of forest management technical time of field foresters was directed toward assisting private landowners with their woodland management problems. The three Clemson College Extension Foresters assisted in this program, primarily with promotional and technical effort. The details of this service and accomplishments during the year are discussed in the following paragraphs.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, insect and disease control and protection, and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowners with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is seventy-five cents per thousand board feet or twenty-five cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper



Tree growth studies serve as a basis for written management recommendations which follow on-the-ground inspections made free of charge for private landowners upon request. Here a boring from the tree is being studied in the field.

weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seedbed preparation, control of the "brown spot" disease of long-leaf pine, and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis with the landowner of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and District Office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission Foresters handled an estimated 1,200 telephone calls regarding insect and disease control and made more than 455 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

During the year, Commission foresters made 1,956 examinations on 209,127 acres of forest land, and selectively marked 14,646,297 board feet and 11,123 cords for 520 landowners on 13,107 acres of forest land. The following table shows the continuous increase in woodland examinations and selective marking assistance that has been rendered since the Forest Management act was passed by the 1941 Legislature.

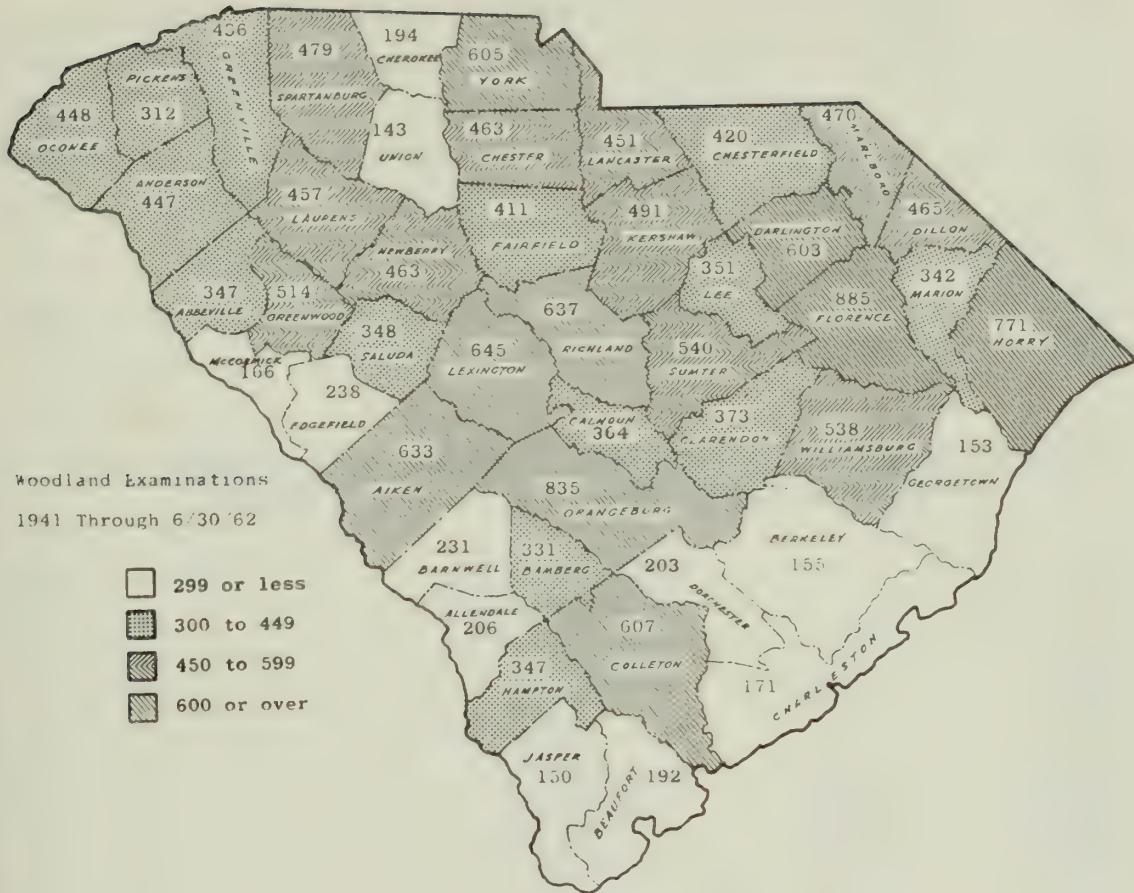
FOREST MANAGEMENT ASSISTANCE

Summary by Years

	Number of Woodland Examinations	Woodland Acreage	Number of Landowners	Timber Marking		
				Woodland Acreage	Bd. Ft. Timber	Cords Pulpwood
1941-42	213	37,500	84	14,792	8,271,202	-----
1942-43	145	62,204	59	8,769	13,851,707	862
1943-44	170	85,300	121	15,407	25,515,145	1,231
1944-45	309	161,412	108	15,359	16,033,407	639
1945-46	256	80,800	78	12,591	15,292,532	546
1946-47	445	105,896	203	18,408	24,735,103	4,237
1947-48	545	148,577	208	13,477	19,788,388	3,500
1948-49	706	126,600	235	13,768	22,009,336	4,429
1949-50	880	163,334	242	8,427	13,283,940	3,385
1950-51	998	173,057	339	14,275	19,634,153	3,896
1951-52	919	170,948	288	11,931	18,031,822	3,089
1952-53	931	142,054	315	12,109	16,332,715	3,935
1953-54	945	143,347	331	8,864	12,264,641	8,467
1954-55	1,166	184,754	399	9,477	13,875,377	5,162
1955-56	1,322	191,143	393	10,973	16,246,795	9,167
1956-57	1,148	163,479	304	8,248	11,365,157	6,008
1957-58	1,423	208,821	394	12,305	14,443,209	7,881
1958-59	1,693	196,529	403	14,374	18,552,478	6,419
1959-60	2,015	230,691	521	17,936	19,920,743	9,432
1960-61	1,954	246,372	411	13,137	13,463,463	8,046
1961-62	1,956	209,127	520	13,107	14,646,297	11,123
Totals	20,139	3,231,945	5,956	267,734	347,557,610	101,454

Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to control the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees. This cull tree removal program is probably the largest single forest management problem facing South Carolina woodland owners.

Field foresters of the Commission are responsible for checking all areas where landowners request forest practices to be carried



out on their property under the Agricultural Conservation Program. In 1961 a total of 2,523 landowners accomplished one or more forestry practices under the Agricultural Conservation Program. Field checks were required and made by Commission field foresters on 2,193 of these properties.

Commission foresters were unable to service promptly all requests from landowners. The increase in requests to assist landowners with clearing scrub oak land, timber stand improvement work or cull tree control, tree planting, etc., plus an increase in requests for sawtimber and pulpwood marking, resulted in many requests not being handled for six to eight weeks after being received. Some landowners do not wait to receive the assistance and, consequently, poor management practices result. A minimum of four foresters is needed at present to keep up with present requests and to increase these services to the small woodland owners in South Carolina.

Commission foresters and Extension foresters continued to follow the practice of referring all larger jobs and some of the smaller jobs to consulting foresters and industry foresters

wherever practical. Our records indicate 178 jobs referred to consulting foresters where properties were examined by Commission or Extension foresters, and it is estimated that about 200 additional jobs were referred directly to consulting foresters where original contact was made by Commission or Extension personnel. Fifty-nine jobs were referred to industrial foresters.

Stumpage prices received from marked sawtimber and pulpwood for the past five years are shown in the following table:

**SAWTIMBER AND PULPWOOD STUMPAGE PRICES FOR
SOUTH CAROLINA—FIVE-YEAR PERIOD**

Fiscal Year	Weighted Average Stumpage price Per M. Board Feet	Weighted Average Stumpage price Per standard cord
1957-58 -----	\$35.72	\$5.86
1958-59 -----	37.00	5.75
1959-60 -----	39.22	6.76
1960-61 -----	36.93	6.37
1961-62 -----	33.89	6.43

Sawtimber prices showed a definite downward tendency during most of the year. Pulpwood prices were fairly steady. The average price for marked sawtimber on sales reported showed only an eight percent decline. In some localities in the state, the downward trend was more pronounced than was shown by these reports. The demand appears to be steady now, although an upward trend has not yet appeared. Landowners who sold timber without forestry advice and assistance averaged far less for their timber than those who did receive forestry assistance.

A record high production of pulpwood occurred in 1961 with increase in both pine and hardwood production. Production of round pulpwood increased 3% over 1960; utilization of wood residues increased 13% over 1960; and the total production in South Carolina increased 5%, compared to a 3% increase for the South as a whole.

Lumber Production in South Carolina 1936 to 1961
(In Million Board Feet)

Year	Softwoods	Hardwoods	Total
1936	610.2	169.8	780.0
1937	572.6	167.4	740.0
1938	577.1	182.9	760.0
1939	643.5	200.5	844.0
1940	682.3	190.2	872.5
1941	879.9	231.0	1,110.9
1942	886.3	196.9	1,083.2
1943	800.3	200.9	1,001.2
1944	708.0	194.1	902.1
1945	550.6	176.1	726.7
1946	748.5	245.0	993.5
1947	685.7	185.4	871.1
1948	-----	-----	-----
1949	636.7	167.4	804.1
1950	719.8	231.6	951.4
1951	678.0	234.8	912.8
1952	722.0	236.0	958.0
1953	705.0	216.0	921.0
1954	626.0	190.9	816.9
1955	621.0	201.0	822.0
1956	628.0	199.0	827.0
1957	650.0	245.4	895.4
*1958	630.0	220.0	850.0
*1959	650.0	220.0	870.0
*1960	630.0	220.0	850.0
*1961	620.0	220.0	840.0

* Estimated

Veneer cut in South Carolina adds up to about 150 million board feet annually. Poles and piling and cooperage amount to approximately 40 million board feet annually.

Round Pulpwood Production in South Carolina, 1936-1961
(In Thousand Cords)

Year	Pine	Hardwood	Total
1936	35.8	12.8	48.6
1937	364.4	29.3	393.7
1938	262.7	21.6	384.3
1939	533.6	17.0	550.6
1940	602.8	67.5	670.3
1941	744.0	55.5	799.5
1942	863.0	44.2	907.2
1943	954.0	32.6	986.6
1944	1,010.0	43.5	1,053.5
1945	823.8	53.7	877.5
1946	909.2	112.8	1,022.0
1947	862.6	85.7	948.3
1948	1,000.1	108.4	1,108.5
1949	913.5	98.7	1,012.2
1950	1,068.6	113.8	1,182.4
1951	1,105.2	145.8	1,251.0
1952	1,132.5	143.2	1,275.7
1953	1,273.4	172.8	1,446.2
1954	1,160.5	170.4	1,330.9
1955	1,268.7	244.6	1,513.3
1956	1,582.9	223.7	1,806.6
1957	1,384.7	270.3	1,655.0
1958	1,346.3	246.4	1,592.7
1959	1,342.1	367.8	1,709.9
1960	1,515.0	386.8	1,901.8
1961	1,535.7	428.9	1,964.7

No new large sawmills located within the state during the year. Mills requiring large logs and high quality veneer logs are finding it more difficult to locate suitable standing timber.

Substantial expansions and additions to the pulp and paper industry in South Carolina were made during the year.

On May 24, 1962 the Stone Container Corporation of Chicago announced plans to build a 24-million dollar kraft paperboard mill on the Great Pee Dee River near Florence. The mill is expected to be in operation in April 1964 under the name South Carolina Industries, Inc. It will provide employment for 300 persons initially, with an annual payroll of approximately \$2

million. The new mill will provide an additional market for farmers and other woodland owners. Wood to be used at the plant will be mostly pine bought from farmers and others at an estimated cost of some \$6 million a year. Some hardwood will also be used by the company. Plans call for initial production of 400 tons of kraft per day, to be expanded to 1,000 tons a day, indicating employment might eventually reach 800.

Expansions have also taken place at the Bowaters Carolina Corporation plant near Catawba. On April 22, 1957 the company announced plans for construction of its \$37,000,000, 400-ton-per-day sulphate pulp mill on a 1200-acre site. The first salable pulp was produced on July 17, 1959. The Bowaters Board Company at Catawba, with a capacity of 160,000,000 square feet of air-process hardboard a year, went into production in June 1960. In January 1961 a major expansion of the sulphate (kraft) pulp mill was made, including construction of a new groundwood pulp mill and a new paper mill. The initial design capacity of the paper mill is 75,000 tons per year of coated printing paper for the magazine field. The groundwood pulp mill is rated at 150 tons per day of bleached ground wood pulp. Employment at Catawba has increased by approximately 160 persons due to the expansion.

Improvements and expansions have also taken place at the other pulp and paper mills in South Carolina (International Paper Co. at Georgetown, West Virginia Pulp and Paper Co. at Charleston, and Sonoco Products Co. at Hartsville). The construction of additional mills outside South Carolina (such as the new Continental Can Company mill at Augusta, Ga.), and expansions at other out-of-state mills have also provided additional markets for South Carolina timber growers.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired full time or part time foresters.

The pulp and paper companies continued to furnish the services of their foresters to assist landowners with proper thinning

of pulpwood. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

Commission foresters checked in the field approximately 455 properties for insect and disease damage. Recommendations were given the owners regarding treatments necessary to control or check the spread of the diseases or insects. More than 1200 telephone calls were answered regarding insect or disease where no field check was necessary.

The working agreement between the State Crop Pest Commission and the Commission of Forestry was continued.

SOUTHERN PINE BEETLE CONTROL ACTIVITIES

During 1960 and 1961 the southern pine beetle was observed in only two counties, Oconee and Pickens, as having serious build-ups in population. In early 1962, an increase of these insects was recognized in Anderson, Oconee and Pickens counties. By June the beetle was present in significant numbers in 17 of the Piedmont counties; Abbeville, Anderson, Cherokee, Chester, Fairfield, Greenville, Greenwood, Kershaw, Lancaster, Laurens, McCormick, Newberry, Oconee, Pickens, Spartanburg, Union and York. Commission foresters aided the Crop Pest Commission with aerial survey and ground checks in Anderson, Oconee and Pickens counties. The Commission cooperated with the U.S. Forest Service in aerial surveying the other 14 counties.

Following the aerial surveys, Commission foresters made contacts with landowners who had the apparent larger infestations. Except in Oconee County, this work did not begin until the surveys in mid-June. By the end of June, 204 spots had been checked and 82 landowners advised of control measures. Those who expressed a desire to conduct control work were provided benzene hexachloride and a garden insect sprayer when one was available. The foresters spent a total of 101 man days on southern pine beetle activities in these counties and located 9,050 infested trees. This work will increase in 1962-63 in an effort to hold these beetle attacks to small loss wherever possible.



Dead, dying and attacked trees give evidence of the destructive power of southern pine beetles which have reached epidemic proportions in 17 counties in the Piedmont section of the state. Control activities were set in motion.

COOPERATIVE FOREST MANAGEMENT

During the year 19 cooperative forest management projects were operated in the state. A summary of the work accomplished by these cooperative forest management foresters is included in the forest management assistance tables shown in this report. The total technical man years devoted to forest management activities, including Cooperative Forest Management Agricultural

Stabilization funds, Conservation Reserve Program and the Watershed Program was 23.8.

WATERSHED PROJECTS

A program to control water on the small watersheds and to protect from overflow the bottomlands along the smaller streams was initiated some years ago through Public Law 566. The Soil Conservation Service and U.S. Forest Service are the primary action agencies for this program. The U.S. Forest Service has transferred their responsibilities to the S. C. State Commission of Forestry through an agreement. There are five Public Law 566 projects in operation in the state and the Pilot Watershed Project is being continued.

There have been preliminary examinations on 25 separate areas to determine the feasibility of beginning new watershed improvement works on these areas. A statement follows describing some of the activities accomplished on the six areas in operation.



Planted trees, which control water run-off, protect reservoirs, and stabilize and build soil, were more and more in evidence as work continued on six watershed areas in the Piedmont section of the state.

TWELVE MILE CREEK PILOT WATERSHED

The Pilot Watershed on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the U. S. Forest Service and the Soil Conservation Service. A total of 114,000 seedlings was planted on 87 acres of badly eroded and gullied land within the project boundaries. A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover can be established. A total of 570 acres were marked for sawtimber and pulpwood harvest. A total of 22 woodland examinations and plans were made covering 947 acres for landowners on the project. Many tracts were marked for pulpwood thinning by pulpwood company foresters with the project forester checking the work. In addition, recommendations for planting, brush control and other measures needed on woodland areas were given to a number of landowners. A total of 3,894 acres have been planted on critical areas in this project.

CONEROSS CREEK WATERSHED PROJECT

The Coneross Creek Project completed its fifth year's operation.

The Coneross Creek Area is located just west of Walhalla in Oconee County.

A total of 45,000 trees were planted in 54.1 acres. A total of 18 land examinations were made covering 975 acres on the watershed area. With this year's planting, a total of 2.167 acres of critical area has been planted to trees.

BRUSHY CREEK WATERSHED PROJECT

The Brushy Creek Project completed the fourth year's operation. A total of 41,450 loblolly pine seedlings was planted on 45.1 acres of critical area. These trees were planted on 17 separate properties. A total of 462,650 seedlings have been planted on 524 acres in the past three years. Thirteen woodland examinations and 8 marking jobs were completed on the watershed area. Additional on-the-ground assistance was given landowners in making forest products sales and in checking properties under the A. S. C. Program.

WATEREE CREEK WATERSHED PROJECT

The Wateree Creek Program got underway in the fall of 1959; however, only 40 acres were planted during the first year's operation. In 1960-61, the Soil Conservation Service had completed farm plans on very few properties and the forestry phases of operation were confined to some site preparation and gully control work. The planting program began again in 1961-62 and 38,000 trees were planted on 55 acres with site preparation accomplished on 127 acres.

The Watershed Project forester made woodland examinations for 3 owners covering 946 acres and gave miscellaneous forest management advice and assistance on the ground to six other landowners.

HUFF CREEK WATERSHED PROJECT

The second year's operation for this project was completed. Fifty-nine thousand trees were planted on 61 acres of eroded land. Seven landowners were assisted with forest management problems. A total of 121 acres of critical area has been planted to trees in the past two years.

BROADMOUTH CREEK WATERSHED PROJECT

This watershed area has no gullied land classified for critical area planting. There are many acres on which other forest improvement work should be done. The project forester assisted landowners with tree planting, timber stand improvement work, timber marking and sales, and the Agricultural Conservation Program.

NURSERIES

The Branch of Nurseries was dissolved in December 1961 and the responsibilities of this branch were placed under the Forest Management section. This change was made as a result of a decrease in nursery activity and for increased administrative efficiency.

Demand for seedlings decreased considerably, mostly as a result of the completion of Soil Bank plantings. General interest in tree planting, however remained at a high level. The demand for seedlings for other than the Conservation Reserve Program has tripled in the last five years. Since 1928, a period of some 34 years, one billion one hundred seventy-three million (1,173,949,713) forest tree seedlings have been planted in South Carolina.

The Commission continued to operate four tree nurseries which produced and distributed to landowners 71,892,420 seedlings for planting during the 1961-62 planting season. An additional 11,952,050 seedlings were brought into the state by others. The cost of seedlings grown at Commission nurseries was \$3.50 per thousand f.o.b. nursery or \$4 per thousand if the seedlings were shipped to the landowner.

Public Law 87-492, which was passed by Congress in June 1962, conveyed to the states the improvements, equipment, materials, and supplies incidental to the nursery construction and operation under the Soil Bank program. This law conveyed to the Commission the complete nursery facilities at Coastal and Ridge Nurseries and certain equipment, materials and improvements at Piedmont and Tilghman Nurseries.

The forest survey which was made in South Carolina during 1958 indicates that some 5,158,000 acres will have to be planted if they are to be productive. This includes idle open land and unproductive forest land that will need some type of site preparation before planting. This land if planted could bring returns to South Carolina landowners in excess of 30 million dollars per year.

FOREST TREE NURSERY ACTIVITIES

Distribution of Seedlings:

During the year a total of 83,844,470 forest tree seedlings were distributed throughout the state. Of this total, 71,892,420 were produced in the four state nurseries.

Loblolly Pine	25,214,550
Slash Pine	43,540,815
Longleaf Pine	2,212,950
Red Cedar	50,970
Yellow Poplar	507,220
White Pine	243,915
Miscellaneous Species	122,000
<hr/>	
Total	71,892,420

In addition to the above seedlings distributed by Commission nurseries, 11,952,050 seedlings were brought into the state or produced in the state by industry nurseries.

Union Bag-Camp Paper Corporation	470,000
Catawba Timber Company	5,127,450
Continental Can Company	2,535,400
Lightsey Brothers	850,000
St. Regis Paper Company	45,000
R. W. Lloyd	8,000
West Virginia Pulp and Paper Company	2,916,200
<hr/>	
Total	11,952,050

The demand for seedlings decreased greatly during the year. This decrease in demand was a direct result of the completion of the Soil Bank plantings. This year 6,700,000 seedlings were furnished to the Conservation Reserve Program as compared to 72 million which were furnished last year. Demand for seedlings other than Conservation Reserve planting was only slightly less than the previous year. It is anticipated that except for a small amount of replanting no seedlings will be planted under the Soil Bank program next year.

The Conservation Reserve Program was started by enactment of the Conservation Reserve Program Act by Congress in 1956. Following the passage of this legislation, the Commission of Forestry entered into formal agreement with the U. S. Forest Service to establish nurseries and provide seedlings for planting under this program. This program was to run for five years with 1960 being the last year landowners could assign their acreage to Conservation Reserve. Funds for establishment of nurseries and the necessary equipment and materials were made available

to the Forestry Commission under the agreement with the U. S. Forest Service.

In June 1962, Public Law 87-492 was passed by Congress which conveyed to the states the improvements, equipment, materials, and supplies incidental to the nursery construction and operations under the Soil Bank Program. This law conveyed to the Forestry Commission improvements, materials, equipment and supplies with an initial cost of \$675,471.00.

The major improvements and equipment conveyed to the Forestry Commission are as follows:

	<i>Initial Cost</i>
Tilghman Nursery	
Seed Extractory	
Packing Building	\$118,177.00
Piedmont Nursery	
Seed and seedling storage facilities	
Underground irrigation system	
Two pump houses	
One well	
Grading, leveling & land preparation	\$ 84,630.00
Ridge Nursery	
Nurseryman's dwelling	
Packing shed	
Seed and seedling storage facilities	
Equipment shed and repair shop	
Irrigation reservoir	
Underground irrigation system	
Two wells	
Grading, leveling & land preparation	\$161,101.00
Coastal Nursery	
Two dwellings, one for nurseryman and one for assistant nurseryman	
One packing shed	
Seed and seedling storage facilities	
Equipment shed and repair shop	
Two pump houses	
Irrigation reservoir and water supply canal	
Underground irrigation system	
Two wells	
Grading, leveling and land preparation	\$182,726.00

In addition to the above real property and land improvements, non-expendable property with an initial cost of \$128,837.00 was also conveyed to the Commission. This property included trucks, tractors, cultivators, sprayers, seeders, distributors, drills, office desks and equipment, and many miscellaneous items.

Tables No. 10 and No. 11 in the appendix are a record of seedlings distributed by counties and class of ownership. Table No. 12 is the total acreage planted by counties and acres in need of planting. The following table records the number of seedlings distributed in South Carolina by years, including out-of-state seedlings.

YEAR	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Inc. other sources)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255
1946-47	1,962,600	1,962,600
1947-48	11,356,990	11,356,990
1948-49	30,338,775	30,338,775
1949-50	29,501,955	29,501,955
1950-51	20,615,315	20,615,315
1951-52	16,619,000	16,619,000
1952-53	22,035,850	32,246,298
1953-54	36,210,100	42,852,314
1954-55	35,373,025	45,182,255

YEAR	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Inc. other sources)
1955-56	34,413,550	42,931,755
1956-57	55,753,600	69,658,736
1957-58	60,846,200	93,369,084
1958-59	123,985,000	166,351,000
1959-60	147,146,365	187,516,418
1960-61	145,609,075	158,330,575
1961-62	71,892,420	83,844,470
TOTAL	984,931,993	1,173,949,713

Forest Tree Seed Collection:

Each year the Commission collects cones to obtain seed for tree seedling production. The field offices of the Forestry Commission locate private collectors in good seed producing areas to obtain the quotas which are set. This year cones and seed were collected as follows: Longleaf Pine, 10,922.5 bushels; Slash Pine, 2,412 bushels; Yellow Poplar, 297¼ bushels; Shortleaf Pine, 9 bushels; Virginia Pine, 2¾ bushels and Red Cedar, 125 pounds.

The seed extractory was operated for the fifth year with continued good results. Excellent seed have been produced through this extractory with higher quantities and better quality seed being obtained per bushel of cones. Prior to the construction of the seed extractory, pine cones were processed in air curing sheds. The average cost of seed to the state since the operation of the seed extractory is \$1.62 compared to \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Each year, during July, sample plots are taken in each county of the state. From this information a cone crop forecast report is prepared. The report indicates that the cone crop for 1962-63 will be poor for loblolly pine. Other species were not checked.

Seedling Survival Examinations:

After seedlings are outplanted one year by landowners, approximately 10% of the seedlings planted in each county are sampled to determine the overall state survival rate. Through these examinations, the Forestry Commission can determine steps to take to eliminate future plantation failures on the part of the landowners. This year the overall state seedling survival rate was

estimated at 69% compared to 67% for the previous year. Survival rates have increased during recent years. Part of this increased survival can be attributed to better packaging and distributing methods at state nurseries.

Research:

Research studies which were started during previous years were continued in cooperation with Clemson College. These studies have contributed greatly to the nursery program in the state. Projects which were continued or completed during the year included studies of seedling bed densities, irrigation, soil depletion, treatment of red cedar seed, plant growth regulators, seed sizing, and others.

Forest Tree Improvement:

Plans were initiated during the year to establish a seed tree orchard for loblolly and slash pine. This orchard will be on an area of the Manchester State Forest. All trees in the seed orchard will be grafted stock representing parent trees with superior qualities. Eventually it is planned to produce enough seed in seed orchards to meet the seed requirements of our nurseries.

Root stock was planted in three nurseries this year for grafting 3,000 scions during March 1963.

Anticipated 1962-63 Seedling Production:

Planned production of seedlings for the 1962-63 planting season is approximately 82 million. Species for distribution will include loblolly, slash, longleaf, shortleaf, white pine, yellow poplar and red cedar.

Horace L. Tilghman Forest Tree Nursery:

This was the fifteenth year of tree seedling production at the Tilghman Nursery since acquisition of the 104.5 acres of nursery land in 1946. Approximately 80 acres are available for seedling production. The remaining area is used for roads, buildings, supply storage, and seed extractory. The seed bed area allows for an annual production of 38-40 million trees on a 1-1 rotation. During the 1961-62 fiscal year, 32,413,230 seedlings were distributed from the Tilghman Nursery. Actual nursery production amounted to 25,621,430 seedlings.

The general soil type is predominantly a red bay sand loam derived from unconsolidated sands and sandy clays of the coastal plains. Being a coarse sand, the soil is subject to heavy leaching when the soil organic matter is allowed to be depleted; therefore, it is imperative that the seedling crops be produced on a 1-1 rotation to allow for intensive soil building practices during alternate years.

Since the nursery was established, 458,159,415 seedlings have been produced and distributed. This represents an annual average of 30,543,960 seedlings. Of these seedlings, 59.5% were slash, 38.4% loblolly, 1.1% longleaf, .08% cedar, .2% cypress, .19% spruce pine, and .05% other species.

The irrigation system, which was changed in 1961 from an overhead system to an underground system, did not prove entirely satisfactory. The new underground system which was installed was of plastic pipe design and numerous breaks in the joints and the viser lines have occurred. It is planned to replace this plastic system with galvanized pipe during the next two years.

Piedmont Forest Tree Nursery:

Land for development of the Piedmont Nursery was acquired in July 1956, in the northwestern section of Pickens County. A total of 81.5 acres was purchased of which approximately 53 acres are available for tree seedling production. The remaining 28.5 acres constitute roads, stream, buildings and uncultivable land. The soil types range from sandy loam to loamy sand and are principally the Congaree and Wickham types.

During the past year, 14,721,000 seedlings were produced. Since this is the fifth year of production, a grand total of 99,168,784 seedlings have been produced and distributed.

Because the soil types in the nursery are of higher quality than in any of the other nurseries, it will be possible to plant part of the area on a 2-1 rotation without seriously depleting the soil fertility. During the 1960-61 fiscal year, part of the nursery was fumigated with Methyl Bromide. This made it possible to reduce considerably the weeding cost.

Coastal Forest Tree Nursery:

In July, 1957, the state acquired, under a ten-year lease agreement, 100 acres of nursery land located approximately two miles

north of St. George, S. C., along U. S. Highway 15. Approximately 73 acres are available for seedling production with the remaining acreage being used for buildings, roads and uncultivable land. Included in the lease agreement is a provision for a right-of-way to a water supply reservoir for irrigation purposes. The nursery improvements, equipment and construction were totally financed through the Soil Bank Conservation Reserve Program so that seedling production could be increased in South Carolina to meet the demands of the Conservation Reserve Program.

During the year, 11,523,100 seedlings were produced. In the four years this nursery has been in production, a total of 150,818,030 seedlings have been produced and distributed.

All of the soil is a Norfolk sandy loam medium phase which lends itself well to seedling production and soil building practices. A sandy clay subsoil approximately 12 to 14 inches below the top soil allows for efficient fertilizer absorption together with limited irrigation. The organic content of the topsoil has been raised to a desirable level, allowing this nursery to plant on a 2-1 cropping rotation. Over-all annual maintained production could average approximately 40 million trees if necessary to meet seedling demands.

Ridge Forest Tree Nursery:

During September, 1958, a fourth nursery site was acquired near Trenton, S. C., under a ten-year lease agreement which has a provision that the annual rental payments accrue toward the final purchase price. Purchase can be effected during any period of the ten-year lease or immediately thereafter. Total area includes 110 acres, of which 10 acres are used as a reservoir area. Approximately 75 acres are available for tree seedling production. The two parcels of land (100 acres and 10 acres) are separated by a one-fourth mile right-of-way which is used for the water main from the reservoir to the nursery site proper. It was necessary to make this division in that water for the reservoir is supplied by a series of springs and contains approximately 67 acre feet of storage water.

The soil types include both medium Norfolk fine sandy loam and deep phase Norfolk fine sandy loam. The small portion that contains the deep phase Norfolk fine sandy loam will require intensive soil management for several years to build up the or-

ganic content to the point where leaching is not a serious problem.

This year, 20,026,890 seedlings were grown and distributed. Since this is the third year of production, a total of 125,168,440 seedlings have been produced by this nursery.

All permanent improvements and nursery layout were completed during the 1959-60 fiscal year. All these improvements, equipment, etc., were financed through the Conservation Reserve Program.

STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

Cassatt State Forest	462 acres
Harbison State Forest	2,202 acres
Manchester State Forest	28,830 acres
Sand Hills State Forest	92,000 acres
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Total	123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

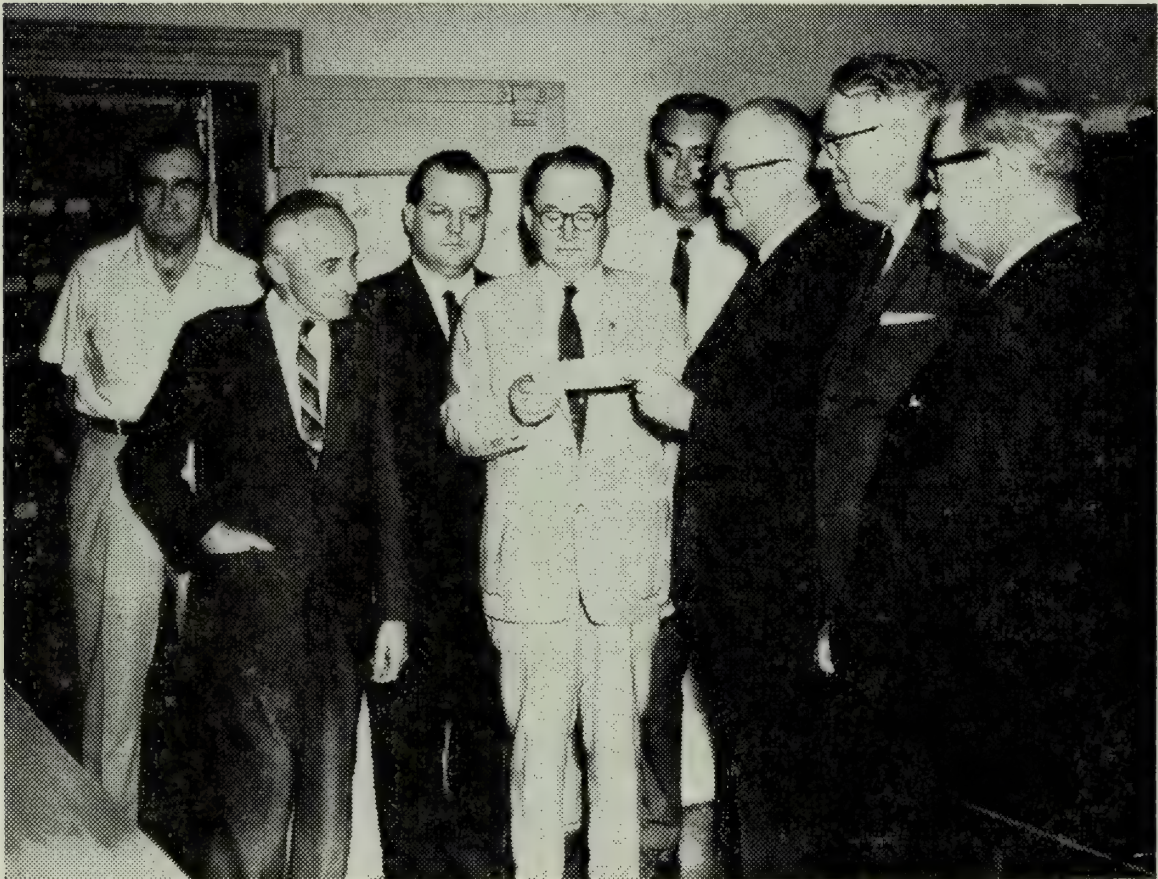
The primary silvicultural objective continues to be the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops to reduce the competition so that pine will survive and grow. Approximately 18,095 acres of scrub oak land have been cleared and replanted to pine since acquisition by the state. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.

The 1960 Legislature passed an act enabling the Commission to use receipts from state forests to speed up the reclamation of scrub oak lands. This program enabled the state to clear approximately 5,000 acres during 1960-61, and 5,949 acres in 1961-62. The detailed accomplishments as a result of this program are included in the write-up for individual state forests.

Payments to Counties

Twenty-five per cent of the gross receipts of all state forest operations are paid to the counties in lieu of taxes. This year's payment of \$75,906.96 is the largest total ever paid. This year's payment by counties is as follows:

Chesterfield (Sand Hills State Forest)	\$ 49,954.70
Sumter (Manchester State Forest)	\$ 25,517.81
Richland (Harbison State Forest)	\$ 434.45



State Forestry Commission Chairman, Fulton B. Creech, presents a check for \$49,954.70 to Chesterfield County Treasurer, John R. Rivers in lieu of taxes on state forest land. Those present (left to right) are: Sand Hills State Forest Director, Randolph B. Lee; State Forester, Charles H. Flory; Chesterfield County Senator-elect, E. McIver Leppard; Mr. Creech; County Representative, Hoover F. Bell; Mr. Rivers; County Senator, Paul M. Arrant; and County Representative, L. R. Redfearn, Sr.

In the past six years the Forestry Commission has paid a total of \$218,886.16 to counties where state forest lands are located, as follows:

Chesterfield	\$119,538.66
Sumter	\$ 88,263.55
Richland	\$ 11,186.59
Kershaw	\$ 897.36

The forester who was employed to coordinate research and experimental work for the Commission was continued this year. Most of the Commission's research efforts were through cooperative studies with either Clemson College or the Southeastern Forest Experiment Station. Some of the studies established are continued and listed below :

1. Comparison of growth on old fields versus clearings.
2. Furrowing for better survival.
3. Geographic seed source comparisons.
4. Spacing study of eight spacings for slash pine.
5. A test of conifer species suitable for sandhill planting on cleared land and old fields.
6. Thinning study of slash pine.
7. Text of direct seeding slash pine.
8. Control of scrub oak by chemical means.
9. Test of species suitable for Christmas trees.
10. Test of direct seeding longleaf and slash pine.
11. Test of control of scrub oak with 2,4,5-T applied with mist blower.
12. Test of control of scrub oak with various chemicals applied with mist blower.
13. Test of control of scrub oak with Dybar (fenuron) pellets.

Detailed reports of activities on each of the state forests follow :

CASSATT STATE FOREST

The area comprising this forest lies about two and one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a fire tower and dwelling for the towerman was erected. Also, a small amount of pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained annually a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property.

All of this forest is now in production and only a small amount of timber stand improvement work is needed to maintain a good state of production.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the fifteen years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a substantial amount to the state treasury. This year 45,661 bd. ft. of sawtimber and 42 cords of pulpwood were sold which brought in a total of \$1,737.81.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state on June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat and to get all records of transfer complete. A survey was completed for approximately 60 per cent of the boundary lines during the last four years. Approximately 10 per cent of this forest is still in an unproductive state. It is on this area that the major silvicultural activities are being directed. Most of the old fields except those being farmed have been planted. The clearing of worthless scrub oak lands and planting to pine is proceeding rapidly and will be completed within the next two or three years.

Fire Protection:

Only 6 fires occurred during the year, burning a total of 171.7 acres. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter unit fire control organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners in the area in the prevention, pre-suppression and sup-

pression of forest fires. The fire record since 1947 has been excellent for Manchester State Forest.

Fish and Wildlife:

Hunting and fishing are handled by a cooperative agreement with the Sumter County Game and Fish Association, which issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed. State forest personnel plant wildlife food strips and patches with the cost being paid by the Sumter County Game and Fish Association.

Agriculture:

Twenty-six tenants rented 820 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, approximately 132 acres of newly cleared scrub oak land were rented for one season to watermelon growers.

Tree Planting:

A total of 1,150,000 trees was planted on the forest during the year, consisting of 950,000 slash and 200,000 longleaf seedlings.

In addition, approximately 17 acres were direct seeded with slash or longleaf pine seed in an effort to determine if direct seeding can be successfully used as a method of regeneration in the sand hills.

Forest Products Sold and Other Receipts:

Sawtimber—1,478,149 bd. ft.	\$ 56,015.30
Pulpwood and Posts—4,534 cords	\$ 39,309.44
Rentals & Leases & Misc.	\$ 6,746.50
Total Receipts	\$102,071.24

Silvicultural Practices:

With the aid of funds made available by the 1960 Legislature the major job of reclaiming scrub oak lands proceeded on schedule. Nine hundred and fifteen acres were cleared and plowed;

132 acres of this were rented to watermelon growers. The total amount that has now been cleared of scrub oak and planted to pine on this forest is 4,537 acres. Seventeen acres were direct seeded and 15 acres treated with mist blower (2,4,5-T) to control scrub oak.

The continued increase of *Fomes annosus* root rot among planted slash pine made it necessary that all stumps which were left in thinning operations to be treated with creosote in an attempt to check the spread. At present this is the only means of control known, and it only prevents the spread and does not kill the disease.

Maintenance and Repair:

Minor repairs were made on all headquarters buildings and on four tenant houses. Major repairs were made on the D-7 and TD-9 tractors. Roads, truck trails and bridges were repaired as necessary.

Demonstrations and Meetings:

The Burnt Gin group camp was used by Consulting Foresters and these foresters visited the state forest area to observe the work that is being done. In addition, Clemson's "summer camp" students visited the area on a two-day training field trip. A forest management, fire control and nursery demonstration was given on the forest to approximately 400 4-H boys and girls.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, damage will be confined to a few hundred acres. The lease was to expire on July 30, 1962, but it was renewed for one year. The State Forestry Commission is being paid \$3,074 per year for this lease.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management ac-

tivities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease.

Before the area was acquired by the Government, it was heavily cut over, badly burned and generally abused. As a result, major activities for the present and for several years to come consist of tree planting, adequate fire protection, and other practices aimed at building up the productivity of the land and increasing the forest stand. Almost one-quarter of the forest remains in scrub oak. The reclamation of this scrub oak land is the major silvicultural objective at the present.

Tree Planting:

Most areas were machine planted; however, some hand planting was necessary in rough cleared areas and on experimental plots. Two million and forty thousand slash pine and 1,493,000 longleaf pine were planted in clearings. Most of this longleaf was planted on the Fish and Wildlife Refuge portion of the property. The total planted on the forest during 1961-62 was 3,533,000 seedlings. In addition, 127 acres were direct seeded with longleaf pine seed.

The total planted on the forest since its establishment amounts to 19,566,352 seedlings. Approximately 17,000 acres have been successfully re-established to pine.

Forest receipts are listed below:

Forest Products	\$174,689.76
Watermelon land rentals	24,976.02
Other agricultural lands and miscellaneous receipts	153.00
TOTAL	\$199,818.78

Fire Protection:

During the year 25 fires burned 599.3 acres. The fire plan which was developed for the properties in the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield unit fire control organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners

adjoining this area in the prevention, pre-suppression and suppression of forest fires.

Recreation:

The Sugar Loaf Mountain Recreation area for white people continued to receive heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake fireplace, a flowing well, parking areas and latrines provided. The 15 Boy Scout troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing, but no swimming is allowed.

The State Park Division continued improvement work on Campbell's Lake Negro State Park. This area received heavy use during the year.

Fish and Wildlife:

Dove hunting only was allowed on the State Forest portion of the Sand Hills State Forest. An effort is being made to build up wildlife stocking in doves, quail, deer, turkey and other native game, and as soon as it appears that sufficient populations of any of these species are available, organized hunting will be allowed on the State Forest portion of the property. Rye was planted on 52 acres and brown top millet on 50 acres.

One hundred and fifty-three hunters participated in 3 dove hunts. This was the first hunting that has been permitted on the forest.

Fishing is allowed in Section's Pond and Sugar Loaf Mountain Lake. Campbell's Lake is open to fishing exclusively for Negroes.

Agricultural Lands:

Several tenants rent and farm agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers have been abandoned and have been planted to pine trees. More of this land will be returned to trees. Thirty-one watermelon planters rented 2,938.5 acres.

Silvicultural Practices:

Under the program authorized by the Legislature to clear scrub oak areas and plant them to pine, 5,034 acres were cleared. Not all of this cleared land was planted, since a large part was rented to watermelon growers for one season. The clearing technique is the same as has been used in the past. A root rake is used to push the aerial portions of the scrub oak into windrows which is then burned; then the area is plowed with heavy discs. The total that has been cleared of scrub oak on this forest is now 13,558 acres. It is expected that approximately 5,000 acres will be cleared during 1962-63.

At a hazard reduction measure, 750 acres were control burned. Timber stand improvement which released young pines from overtopping hardwoods was done on 600 acres.

Maintenance and Repair:

Some repair work was done to Sugar Loaf Mountain recreation area. The general condition of headquarters and director's residence is good and only routine repairs were made during the year. A considerable effort was necessary to maintain truck trails, bridges and firebreaks. Some major overhaul on heavy tractors was necessary.

Boundary Surveying:

No official boundary surveying was accomplished during the year. There were one or two instances where some dispute occurred as to location of property boundaries; however, most of these were resolved. There is need for boundary survey and marking on a large part of the area.

FOREST FIRE PROTECTION

INTRODUCTION

The S. C. State Commission of Forestry's Fire Control Branch provides intensive fire protection on 11,175,000 acres belonging to the state and private landowners. Forest fire protection is furnished to private landowners on the theory that the landowner himself is responsible for his woodland fire protection, and the S. C. Forestry Commission assists landowners with his fire problems whenever and wherever possible.

For administrative purposes the state is divided into seven forestry districts with headquarters in Camden, Florence, Kingstree, Newberry, Orangeburg, Spartanburg, and Walterboro. The Districts are further sub-divided into county units with fire control organizations which have a limited amount of fire suppression equipment. This county organization is able to help private landowners with their woods fires on a local basis. Many landowners throughout the state own and maintain their own hand tools and mechanized equipment for fire suppression and have sufficient personnel to adequately handle their own wild fire problems.

In addition to the 11,175,000 acres mentioned above, the U. S. Forest Service protects 587,221 acres within National Forest boundaries. Other federal agencies own and protect approximately 58,100 acres in the state.

County Units:

Each county forest fire control organization is headed by the county ranger. Each county is divided into warden districts for which fire wardens are responsible. Suppression unit operators and towermen, along with the ranger and wardens, make up the personnel of a county unit. The number of wardens, tractor operators, and towermen varies with the size and forest acreage of the county and in some cases with particular problems which may exist. South Carolina's total county unit personnel consists of 46 rangers, 134 wardens, 68 tractor operators, and 138 towermen.

County Forestry Boards:

The State Forest Fire Protection Act of 1945 provided for a county forestry board consisting of five members to be appointed

by the Commission of Forestry upon the recommendation of the majority of the County Legislative Delegation. The individuals who serve on the forestry boards in each county are appointed for a five-year term. An annual meeting is held to discuss and review forest fire protection activities within the county. Board members are kept informed of the various activities of the Commission of Forestry and are contacted periodically in connection with the work program. Many of the accomplishments in forest fire control are attributed directly to the efforts and support of the individual board members throughout the state.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards, was organized and held its first meeting in 1952. It is composed of one delegate from each county board elected by the membership of the board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities, including forest fire control, forest management, reforestation, and information and education. The committee meets annually to discuss the proposed forestry program for the coming fiscal year and also consider the budget request which is submitted to the State Legislature. Individual committee members are responsible for familiarizing themselves with local forestry conditions and activities within their counties and making recommendations to the Commission of Forestry in an endeavor to further the overall forestry program in South Carolina.

State Forests and Parks:

The 30 state park areas and 4 state forests in South Carolina comprise approximately 172,127 acres. The individual park superintendents and state forest directors are responsible for the protection of timberland areas within their boundaries on a cooperative basis with the Branch of Forest Fire Control. Fire plans, which include recommendations for the adequate protection of these state-owned areas, have been prepared and furnished each superintendent.

Cooperative Agreements With U. S. Forest Service:

The Commission of Forestry and the U. S. Forest Service maintain a formal agreement to assist one another with the de-

tection and suppression of fires which occur along the immediate vicinity of the National Forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

In order to get the many and varied jobs in fire control accomplished efficiently and economically, a continuous training program must be carried on. Training is considered one of the most important fire control activities with special emphasis being given to local and on-the-job training. This training is tailored for the individual and the job for which he is responsible. Special group training is also carried on periodically covering such subjects as law enforcement, damage appraisal, large fire organization, and civil defense. Special training held during the 1961-62 year included a week-long law enforcement school.

Inspections:

Each year, complete fire control inspections are carried out in the counties of the state to discover and correct weak points in the fire control program. All phases of fire control activities are covered in these inspections which are conducted at least every other year in all counties.

Inspections are also constantly carried out on the fire control fleet of mechanized equipment. Emphasis is placed on preventive maintenance to keep the repair jobs small and repair costs to a minimum.

Numerous inspections are made on equipment during the year by traveling mechanics, district mechanics, and by the equipment operators themselves.

Fire Control Progress Checks:

From time to time in each district of the state, fire control progress checks are held. The purpose of these checks is to delve into each facet of the entire fire control program to determine what can be done to improve the over-all activities of the organization. These checks are carried out by the Central Office fire control staff in an endeavor to maintain a high degree of efficiency.

Law Enforcement:

The Commission continued to intensify the fire law enforcement program in an effort to reduce fire occurrence. Cooperation from the State Law Enforcement Division and local law enforcement agencies contributed materially to an effective law enforcement program during the year. A week-long law enforcement school was held in October at Florence. Trainees of this school were commissioned by the Governor as Forest Fire Investigators. Instruction at the school was provided by the Governor's office, Attorney General's office, the FBI, SLED, and Civil Defense. A total of 52 Investigators were commissioned in 1961-62.

There were a total of 347 prosecutions and 330 convictions obtained for violations of the various forest fire laws during the year. Of this number, 46 prosecutions and 44 convictions were for violation of the burning permit and/or notification laws; 266 prosecutions and 258 convictions were for violations of the careless and negligent law; and 35 of the prosecutions and 28 convictions were for the violation of the willful and malicious law.

The main causes of forest fires were smokers, 1,158 fires; careless brush and debris burning, 1,002 fires; and incendiary or deliberate burning, 755 fires. These three causes accounted for 2,915 of the 3,668 fires that burned during the year.

No new burning notification or permit laws were enacted this year. Counties with the permit law statutes are Chesterfield, Aiken, Orangeburg, Georgetown, Charleston, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Counties with notification laws include Beaufort, Colleton, Hampton, and Jasper.

Fire Plans:

All county unit organizations are furnished a detailed forest fire control plan which outlines procedures for the control and operation of fire suppression activities. The plans are kept revised to conform with current conditions and operating procedures.

In addition to the unit plans furnished each county organization, a number of similar plans have been prepared for various landowners throughout the state who desire to maintain adequate fire protection on their timberland holdings.

Legislative Forestry Study Committee:

The 1955 session of the General Assembly provided for the appointment of a Legislative Forestry Study Committee which has been continued through the years. This committee, which originally was designed to study forest fire conditions in the state, has been expanded to cover the entire field of forestry. Each year, the committee schedules a series of meetings and hearings and formulates many recommendations which are consolidated in an annual report to the General Assembly. The General Assembly extended the Legislative Forestry Study Committee for the fiscal year 1962-63.

Southern States Forest Fire Control Conference:

The twenty-third Southern States Forest Fire Control Conference was held in Panama City, Florida, in May of 1962. These annual meetings are designed to promote the efficiency of forest fire control work.

Southeastern States Forest Fire Compact Commission:

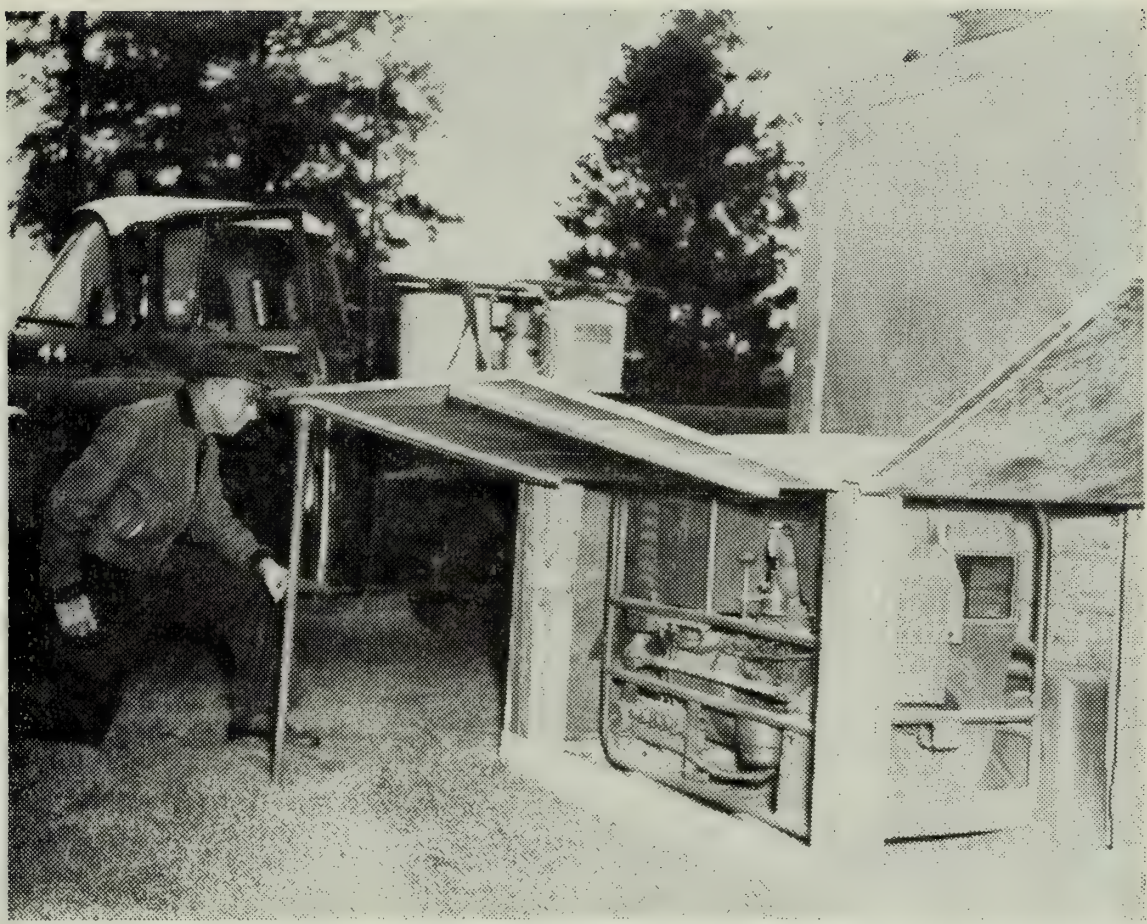
The ten Southeastern States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia make up the Southeastern States Forest Fire Compact Commission.

The membership of this Commission from each state is comprised of a Compact Administrator (the State Forester) and a four-member advisory committee. The South Carolina membership includes Senator L. Marion Gressette of Calhoun County, Representative Charles G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County, and R. R. Rigby of Columbia.

The governing body of the Compact Commission is a five-man executive committee headed by a chairman. The chairman is selected by the Commission at its annual meeting.

Civil Defense:

The Commission of Forestry cooperates with State Civil Defense in relaying messages to and from State Civil Defense Headquarters and local civil defense chairman. This cooperative assistance is rendered during any emergency or disaster which may hit the state. The Commission also participates in civil defense alerts which may be scheduled from time to time. All



Forty-four emergency electric power units, located strategically throughout the state, serve as a substantial cooperative contribution to the Civil Defense effort within our state.

messages are relayed over the Commission's two-way radio network by members of the central fire control office, district offices, and county personnel.

IMPROVEMENTS, TOOLS AND EQUIPMENT

Lookout Towers:

The Commission of Forestry operates 138 forest fire lookout towers in the state. In addition to the state-operated towers, the U. S. Forest Service owns and operates a number of lookout units on the Sumter and Francis Marion National Forests. All tower-men, both state and federal, cooperate in spotting and locating fires which occur within their visual range.

Tower Unit Buildings:

During the 1961-62 fiscal year, no major improvements were installed at the tower sites. Routine maintenance jobs were carried out at all towers during the year.

**ESTIMATED CAPITAL VALUE OF FIRE PROTECTION
IMPROVEMENTS (Based on Replacement Value)**

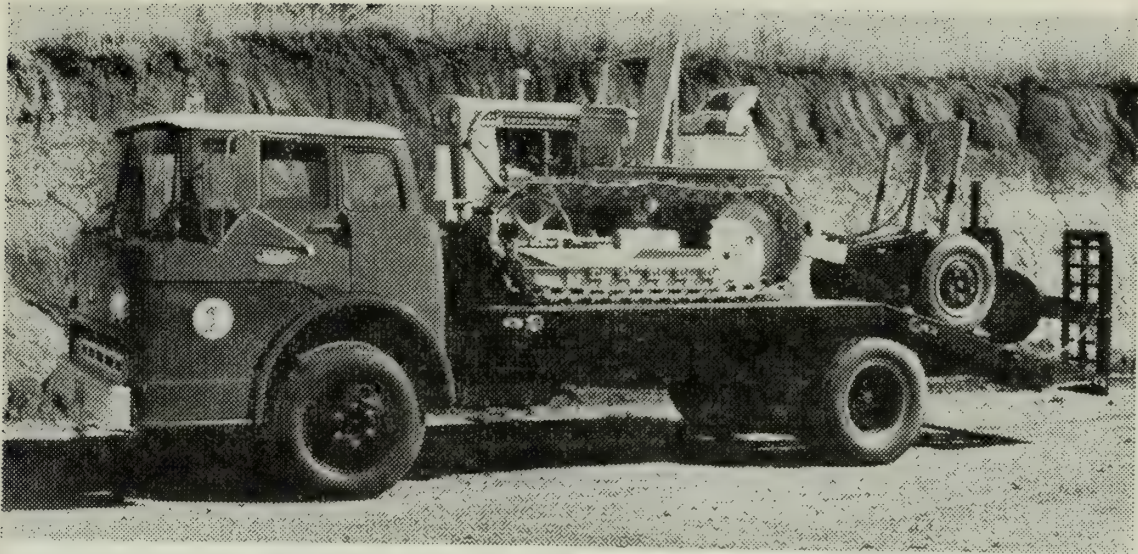
135 Lookout Tower Units	\$2,947,503
46 Fire Danger Measurement Stations	3,450
250 Miles Telephone Line	75,000
Central Radio Shop and Map Laboratory	25,000
Central Repair Shop and Warehouse System	286,480
6 District Repair Shops	30,000

Radio:

7 Remote Control Base Stations,		
60 watt	@ \$ 1,200	\$ 8,400
2 Remote Control Base Stations,		
60 watt	@ 1,800	3,600
1 Remote Control Base Station,		
250 watt	@ 3,600	3,600
1 Remote Control Base Station,		
100 watt	@ 2,000	2,000
26 Base Station Units, 50 watt @	900	23,400
155 Base Station Units, 10, 25, and		
30 watt	@ 535	82,925
250 Mobile Units (Single Chan-		
nel) in Trucks and Cars ... @	550	137,500
46 Mobile Units on Tractors .. @	650	29,900
6 Mobile Units (Dual Channel)		
..... @	625	3,750
12 Mobile Units (Dual Channel)		
..... @	900	10,800
5 Portable Units	@ 400	2,000
15 Special Radio Control Units		
for Wardens	@ 135	2,025
90 Auxiliary Receivers (in War-		
dens' Homes)	@ 250	22,500
		<hr/>
		332,400
		<hr/>
TOTAL		\$3,699,833

Equipment:

During the fiscal year, no additional fire suppression units were purchased. Thirteen new ranger pickup trucks were purchased as replacements for old, worn-out units. Eight medium tractor suppression units were replaced with new crawler-type tractors,



Eight new crawler-type tractor replacements improve the fire fighting capabilities of the Commission's field forces.

and six new transport trucks were replaced during the year. Two station wagons were replaced with new vehicles for use by traveling mechanics.

INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1962

2,361 Back Pack Pumps	\$ 41,500
5,014 Fire Rakes	17,220
2,669 Fire Swatters	10,656
373 Backfire Torches	7,600
10 Heavy Suppression Tractor-Plow Units w/Transports	228,000
3 Heavy Dozers	80,000
1 Medium Suppression Tractor-Plow Unit w/Transport	20,800
69 Light Tractor-Plow Units w/Transports	520,950
1 Heavy Lowboy Truck-Transport	10,000
45 Ranger Pickup Trucks	78,750
1 1/4-Ton Jeep	2,250
7 Sedan Delivery Trucks	14,000
3 2-Ton Stakebody Trucks	7,650
16 1/2-Ton Pickup Trucks	28,000
1 Mobile Field Headquarters Unit	3,200
1 Field Kitchen w/Power Supply Trailer and Water Truck	14,000
1 Supply Van	2,500
TOTAL	\$1,087,076

Equipment Maintenance Shop:

The Fire Control Branch operates a Central Repair Shop at Sumter where heavy and specialized repairs are made to all fire control equipment. Three traveling mechanics, headquartered at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator and the district mechanic, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 984 complete field inspections of equipment and conducted 1,276 field repair jobs.

Central Shop personnel at Sumter made many repairs to automotive equipment owned by the Commission and manufactured many items necessary for field use. Some of the work handled by the mechanical force is listed below.

Major repairs were made to 42 light tractors, 15 heavy tractors, 54 light trucks, 30 heavy trucks, 8 light plows, 3 heavy plows, 2 light trailers, and 6 heavy trailers. Minor repairs were made to 3 light tractors, 4 heavy tractors, 7 light trucks, and 2 heavy trucks.

In addition to repair work, many items were manufactured at the Central Shop. Work done included modifying or building equipment bodies, making booster tanks, radio boxes, and equipment racks. Repairing and putting into service surplus equipment is also done at the Central Repair Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. These facilities are used for warehousing certain materials and supplies necessary for the efficient operation of each of the forestry districts and by the mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district. The traveling mechanics who operate from the Central Repair Shop at Sumter also use the shops in assisting the local mechanics to more effectively keep all motorized equipment in good operating condition at all times and to make any necessary repairs which may be needed locally.

Columbia Radio Repair Shop:

During the summer and fall of 1958, a new Central Radio Communications Maintenance and Repair Shop was erected at 241 Catawba Avenue in Columbia. This building is being used as a central headquarters for all radio communications installations, maintenance, and repairs for the entire state. This Central Radio Shop coordinates the activities of all district radio technicians who are assigned to district repair shops in the various forest service districts.

Fire Control Maps:

A new map laboratory was installed in one section of the Central Radio Repair Shop during fiscal year 1958-59. This laboratory, complete with drafting room and map-making equipment and facilities, is being used to produce all forest fire control maps which are needed by district and county unit personnel in carrying out fire protection activities within the state.

Radio:

The program of dual channeling all radio equipment in 5 districts was completed in Florence and Orangeburg Districts. The channels assigned to these two districts are 159.450 Mc. and the original 159.270 Mc.

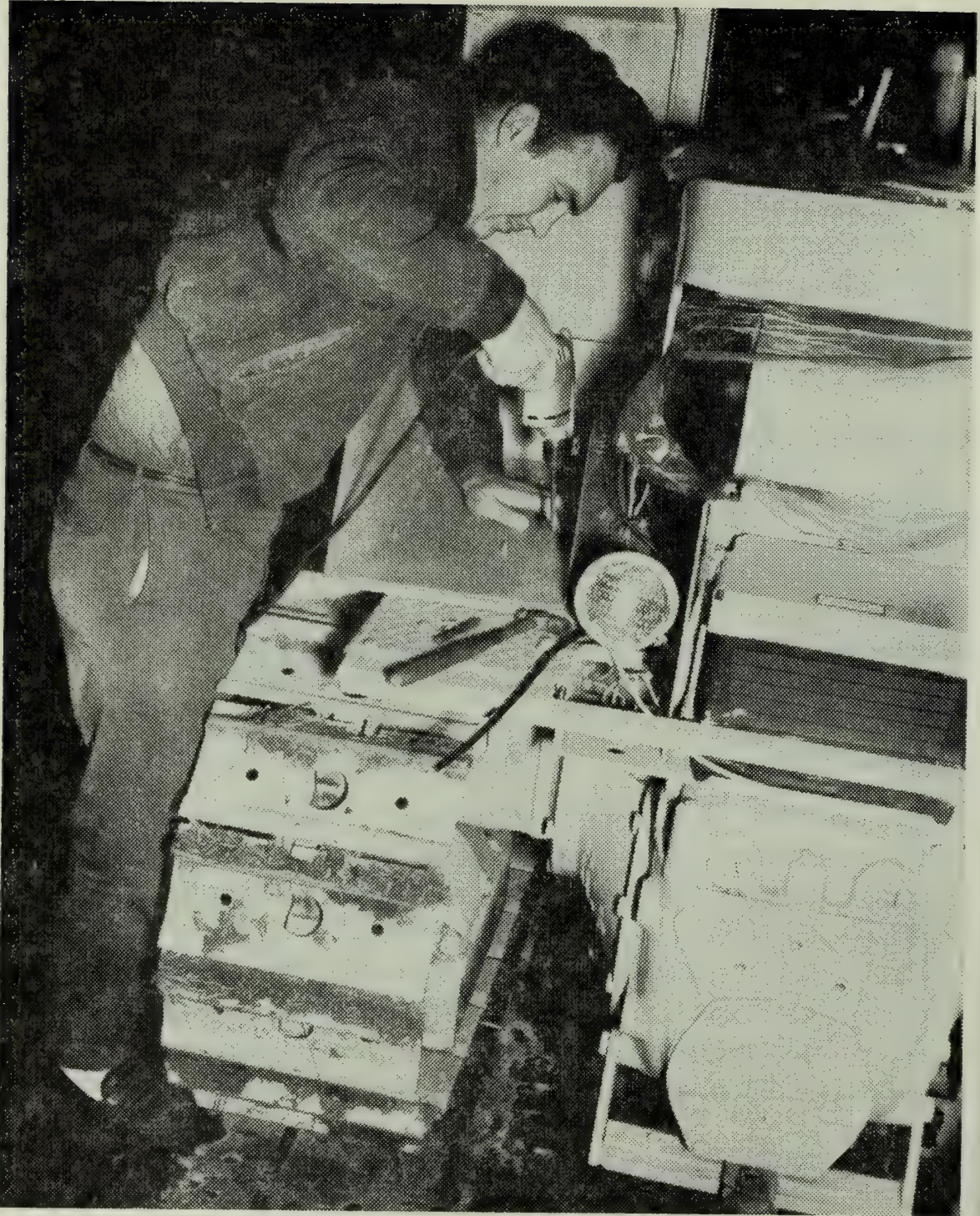
This same dual-channel conversion is now in progress in Kingstree and Newberry Districts on 159.375 Mc. and 159.270 Mc.

Use of this additional channel has greatly reduced the radio interference between districts and affords much more reliable communications.

A seventh district radio technician was employed and will be designated as the Newberry District Technician.

Use of Aircraft in Fire Control:

Radio-equipped planes are used on a contract basis when necessary to supplement the lookout towers. During periods of low visibility, towers cannot adequately cover their area of responsibility and, without the use of airplanes, many fires would occur and burn for a long period of time undetected before being discovered and reported to the fire control organization. Whenever large fires occur, planes are also used to direct the actions of the ground suppression forces. During periods of high fire occur-



Installing 2-way radios on new suppression units and keeping the older equipment "talking" is a major maintenance and repairs program. More than 190 base radio units and more than 300 mobile radio units keep seven radio technicians quite busy.

rence, air observers direct fire control personnel to those fires which need greatest attention and assist them in organizing their plans of attack.

Fire Danger Measurement:

Fire danger measurement stations are located in each county of the state. Readings are taken at these stations twice daily and the

information is disseminated to all fire control personnel to keep them informed of current degrees of fire danger. Fire control personnel use this information to determine the probability of fire occurrence and also the expected rate of spread in the event fires occur. Accordingly, personnel are better able to plan their daily work activities. Class fire days are rated from 1 to 5, with 1 the lowest and 5 representing the highest degree of fire danger. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the 5 major ratings: 186 Class No. 1 days; 102 Class No. 2 days; 60 Class No. 3 days; 15 Class No. 4 days; and 2 Class No. 5 days.

Legal Fires:

Legal fires are all forest fires which are previously authorized by the landowner and started by him or his authorized agent and which burn entirely upon his land. A total of 5,008 fires which burned 254,362 acres were conducted by individual landowners during the year and recorded by county unit personnel. 450 fires burning some 81,641 acres were conducted for hazard reduction purposes; 219 fires which burned 47,467 acres were handled on hunting preserves for the purpose of improving woodland conditions for hunting and the management of game. Burnings conducted to rid timber areas of accumulated debris and rubbish accounted for 1,733 fires which burned 14,462 acres. Burning of timberland areas for grazing purposes accounted for 176 fires which burned 10,956 acres. 2,430 fires burning 99,836 acres were conducted for miscellaneous purposes such as the destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

A total of 3,668 forest fires burned 35,795 acres in South Carolina during the 1961-62 fiscal year. The 1961-62 fire season represented 1,108 fewer fires than during the previous year. The worst months for fires were December, February, March, and April. The total acreage burned during 1961-62 was 0.32% of the total woodland under protection in South Carolina. The average area burned per fire in the state was 9.8 acres.

Counties which were hard hit by high fire occurrence and acreage burned were Berkeley which had 216 fires burning 3,238.2 acres; Dorchester, 101 fires which burned 2,656.0 acres; Jasper,

106 fires, 2,610.0 acres; Orangeburg, 173 fires, 2,420.7 acres; and Williamsburg, 171 fires, 2,471.2 acres.

Counties with light occurrence and acreage burned included Calhoun with 10 fires burning 104.7 acres; Abbeville, 16 fires, 103.3 acres; Bamberg, 17 fires, 78.4 acres; Newberry, 21 fires, 70.6 acres; McCormick, 23 fires, 62.0 acres; Saluda, 22 fires, 52.8 acres; and Cherokee, 23 fires, 68.0 acres.

Leading causes of forest fires in the state were smokers, debris burning, incendiary, and miscellaneous. Smokers accounted for 31.6% of all fires in South Carolina during the 1961-62 year; debris burning was responsible for 27.3%; incendiary fires for 20.6%; and miscellaneous for 11.7%. Number of fires by causes was smokers 1,158 fires, debris burning 1,002 fires, incendiary 755 fires, and miscellaneous 430 fires.

Recorded precipitation in South Carolina during fiscal year 1961-62 was approximately 4 inches less than the previous fiscal year. The 51.27 inches of rainfall which was recorded at the 46 fire danger measurement stations in the state represents a departure from normal of 2.44 inches above the long-time average. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

Month	Amount Rainfall (Inches)	Departure from Normal (Inches)
July, 1961	5.36	— 0.41
August, 1961	8.30	+ 2.64
September, 1961	2.31	— 1.72
October, 1961	0.63	— 2.18
November, 1961	2.40	— 0.51
December, 1961	4.78	+ 0.61
January, 1962	5.50	+ 1.73
February, 1962	4.05	+ 0.24
March, 1962	5.51	+ 0.97
April, 1962	3.69	— 0.08
May, 1962	2.00	— 1.48
June, 1962	6.74	+ 2.63
TOTAL	51.27	+ 2.44

A five-year summary of precipitation by fiscal years is shown below:

Year	Amount Rainfall (Inches)	Departure from Normal (Inches)
1957-58 -----	55.18	+ 7.93
1958-59 -----	47.03	— 1.80
1959-60 -----	64.29	+ 15.46
1960-61 -----	55.00	+ 6.17
1961-62 -----	51.27	+ 2.44
Average -----	54.55	

INFORMATION AND EDUCATION

INTRODUCTION

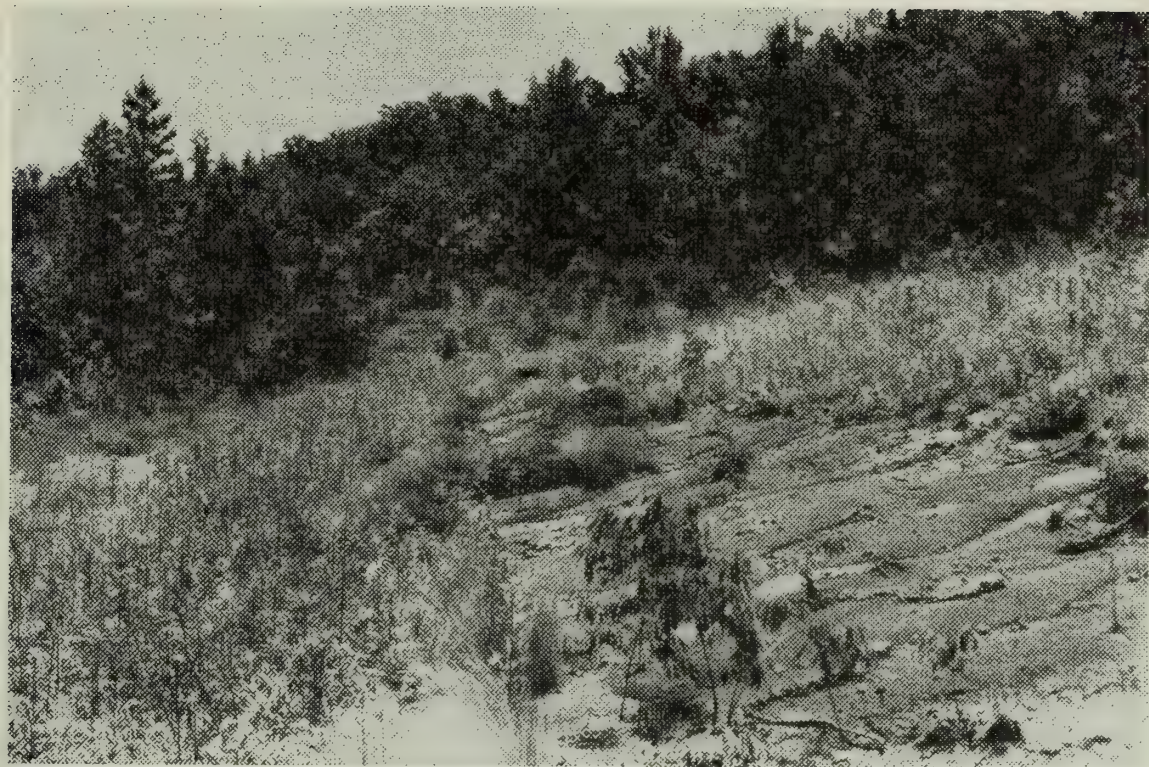
There are five acres of forest land in South Carolina for every man, woman and child, or a value of nearly \$500 each year to each family in South Carolina. This adds up to nearly 12 million acres of forest land and an annual return of more than a third of a billion dollars in the growing, harvesting, manufacturing, and sale of forest products.

There is a continuing need for stepped-up activities in forest conservation and development to make each acre of forest land produce the maximum amount of wood fiber, as well as provide the necessary recreation facilities to our ever-increasing population. The part that our woodlands play in the supply of good and plentiful water for both home and industrial use is also becoming increasingly important.

A good, sound forest conservation program involves not only trees but people as well. The success of the Commission's forest conservation activities depends upon an adequately informed public, and involves many people and many different activities.

The Commission functions on the premise that every member of its organization has a part in the educational program. Personnel of the Commission reach out in the educational program through press releases, photographs, pamphlets, talks, field demonstrations, films, radio and television programs. Through these media South Carolinians are made aware of the problems that face our state in the maintenance of our state parks that serve millions every year, and the conservation of our natural resources that make possible a livelihood for thousands and comforts and necessities for all.

The Commission's educational program is geared to the fact that every South Carolinian has a stake and a responsibility not only in the present but also in the future of the state parks and forests of South Carolina. It is a fact that the forests of South Carolina support the state's third largest industry. It is also a fact, though, that the state's woodlands are producing at less than half of their potential capacity. When the landowners and people of our state realize the potential value of woodland production and apply practical methods of conservation and wise use, the



In South Carolina more than five million acres of idle or unproductive land, in both large and small tracts, should be planted to trees.

amount of timber available for commercial use can be more than doubled.

The aim of the Commission's information and education program is to get forestry and state park information to the people of South Carolina so that the problems confronting us may be solved. Information and education efforts are keyed to the following points:

1. Forest Fire Protection

More than 3,700 illegal woods fires occur annually in South Carolina, with 99 per cent being caused by people.

2. Unwise cutting practices mean low production and inferior forest products.

3. Trees should be planted on more than five million acres of idle or unproductive land.

4. Improvement of the quality of many existing stands of timber throughout the state by the removal of inferior species as well as low grade and poor-quality trees.

5. Full appreciation should be developed in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of South Carolina.

FOREST FIRE PREVENTION

A realistic localized approach to teaching forest fire prevention is used by personnel of the State Commission of Forestry. Particular emphasis is given the damage caused by the average slow-burning quiet fire that so many South Carolinians are accustomed to seeing, with the spotlight on the loss of little trees as these fires sweep through our woodlands. Attention is drawn to the protection of little trees as the key to adequate stocking of our woodlands in the future.

A serious effort is made to reach every man, woman, and child within the state of South Carolina through personal contacts; posters and publications available through the national Cooperative Forest Fire Prevention Campaign and the Southern Cooperative Forest Fire Prevention Campaign; and illustrated talks and motion picture showings in community meetings, in private homes, civic club meetings, and school rooms. Wall and pocket calendars, roadside signs and exhibits, and other materials produced by the Commission, broaden the means of bringing the conservation message to each and every citizen in the state.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The message of the Cooperative Forest Fire Prevention Campaign, with the support of the media of public information reaches in one way or another nearly every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, a non-profit organization, in cooperation with the State Foresters and the U.S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, bookmarks, newspaper ads, radio platters, TV spots, films, and other materials to bring forest fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional

ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flashlights, wallets, moccasins, T-shirts, scarfs, fishing tackle, archery sets, cigarette snuffers, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, coloring books, comic books, story books, bubble bath, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls, and other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Feeling the need for a more local slant than some of the published materials in the national campaign can provide, the states and the U. S. Forest Service in the Southern region have continued to cooperate in the production of forest fire prevention materials with a Southern flavor. State Forester Flory is a member of the committee guiding the development of this program. The fourth year's operation of the Southern program saw continued production of recorded radio spots, a series of TV spots, news ads, and a poster, all of which are currently being distributed. The Southern materials supplement the national materials to intensify and strengthen forest fire prevention efforts in South Carolina.

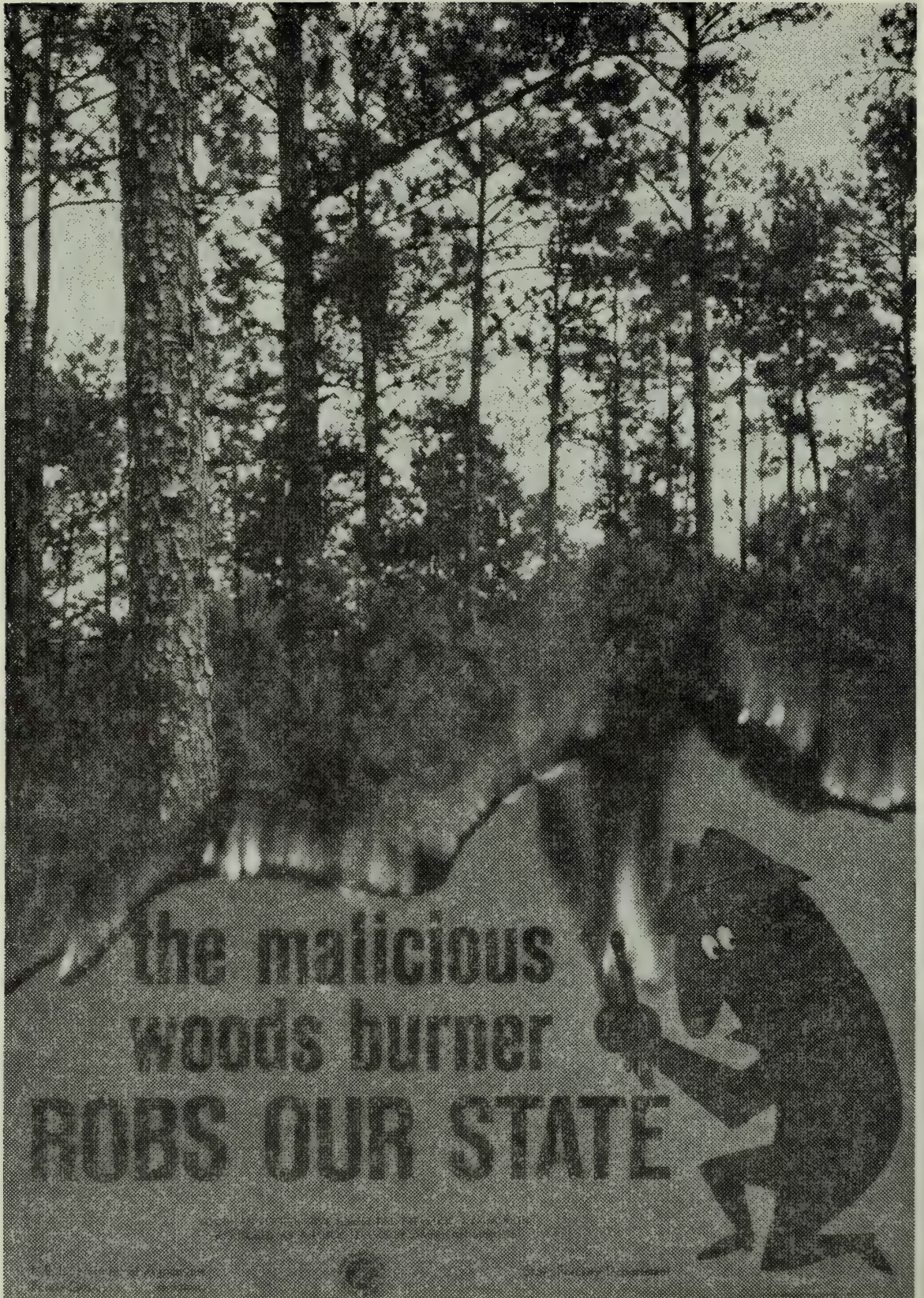
FOREST FIRE RECORD

The branch of Information and Education continued to keep the press and public informed as to the forest fire situation throughout the state, stressing the need for particular care during the critical dry and windy months of January, February, March, and April. This information is made available by articles and photographs for newspapers, and motion picture footage for television use, for example.

The continuing occurrence of intentionally set fires during the year points up the urgent need for an intensified program of child and adult education as well as the need for a strengthened law enforcement program.

SCHOOL PROGRAMS

School children throughout the state received basic information on forestry and forest fire prevention from foresters, rangers, and wardens of the Commission of Forestry. Some 1,022 pro-



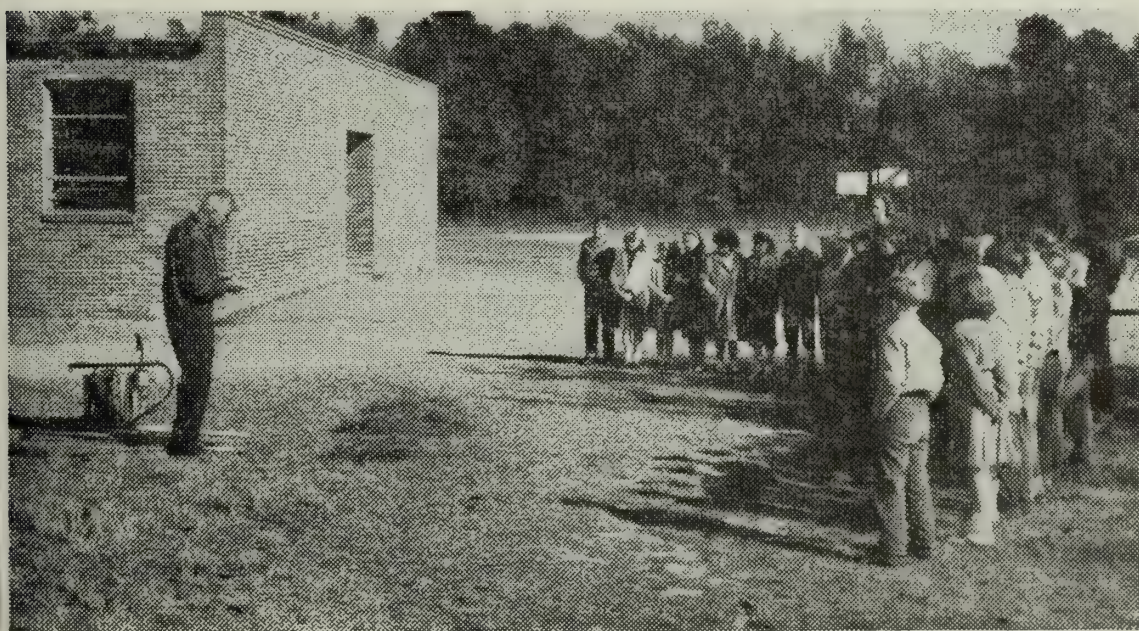
The Southern Cooperative Forest Fire Prevention Campaign aims much of its material at a key problem in the South—Incendiarism.

grams were held in the fifth and sixth grades where either school-yard demonstrations of fire control equipment and suppression techniques, or color slides were shown to help bring the conservation story to the classroom. In these two grades alone, 47,366 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slides programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations mentioned above, all third grade children throughout the state (more than 70,000) received a copy of the booklet "Smokey Bear's Story of the Forest." An equal number of second grade students received coloring sheets with forest fire prevention and conservation messages. Over 65,000 fourth graders received a color comic book entitled "The True Story of Smokey the Bear."

Many forestry movies were also shown in school auditoriums which brought conservation information to students of all grade levels.

The Commission's school programs are designed to build a stronger and more appreciative community of the future by giving basic instruction and information to children on the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.



A warden demonstrates simple fire suppression methods before a fifth grade class as part of the Commission's educational program.

FORESTRY DEMONSTRATIONS

During the year 1,538 persons attended 83 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species and timber stand improvement.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson College Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies and organizations cooperated to make the observance of 1961 Arbor Day and Conservation Week a success. South Carolina Law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 55,000 copies of a special folder were printed and distributed to schools and other interested groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs include tree planting exercises.

A total of 389 Conservation Week and Arbor Day programs were reported, with 45,051 persons attending. Undoubtedly many other programs were held which were not reported to the Forestry Commission.

FIRE PREVENTION ROADSIDE SIGNS

Roadside signs continued to carry the three messages in the following sequence: USE YOUR ASH TRAY—HELP PREVENT WOODS FIRES — PROTECT LITTLE TREES — KEEP SOUTH CAROLINA GREEN. First erected in February 1953, the fire prevention roadside signs appear on highways throughout

the state. The Commission hopes to be able to intensify this project from year to year by providing additional signs where thousands of motorists will see these forest fire prevention reminders as they travel the highways.

MOTION PICTURES

Motion pictures are a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 53,179 people saw motion pictures on forestry at 564 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

Since 1930, when forestry was added as a course of study in vocational agriculture classes in South Carolina, the Vocational Agriculture staff of the State Department of Education and the State Commission of Forestry have worked very closely in emphasizing the importance of the conservation of our forest resources to the future farmers of the state.

School forests are excellent aids in teaching forestry. They are "outdoor classrooms" where boys learn by doing. The students actually plow firebreaks—they protect their forest from fire. They set up thinned and unthinned plots and compare growth. They learn tree selection—which trees to cut, which to leave. They learn to plant forest tree seedlings—they put idle acres to work. This practical experience does not stop with work on the school forest or with the student. Often he takes the information home to his family and neighbors and they in turn learn forestry from him. Many students have home forestry projects. They plow firebreaks, plant seedlings, thin crowded stands, or do other forestry work on their own land. This tends to make them as well as all members of their families conservation-minded.

Many schools do not have school forests, but some forestry work is carried on by all vocational agriculture classes. Com-

mission Foresters and Rangers are available to assist vocational agriculture classes with talks, demonstrations, and field work on forestry, and also provide filmstrips, motion picture films, booklets, posters, and other aids for teaching forestry.

The Forestry Commission sponsors an annual FFA and NFA Chapter Forestry Contest, in cooperation with the Vocational Agriculture supervisory staff of the State Department of Education. For the 1961-62 school year awards were presented to the winning FFA and NFA Chapters in each Vocational Agriculture District as Follows:

DISTRICT I

- (1) Cleveland FFA Chapter
- (2) Pendleton FFA Chapter

DISTRICT II

- (1) Fort Mill FFA Chapter
- (2) Jonesville FFA Chapter

DISTRICT III

- (1) Strom Thurmond FFA Chapter
- (2) Midway FFA Chapter

DISTRICT IV

- (1) Walterboro FFA Chapter
- (2) Ridgeland FFA Chapter

DISTRICT V

- (1) McBee FFA Chapter
- (2) St. Johns FFA Chapter

DISTRICT VI

- (1) Andrews FFA Chapter
- (2) Wampee-Little River FFA Chapter

DISTRICT I

- (1) Mims NFA Chapter
- (2) Bryson NFA Chapter

DISTRICT III

- (1) Bethel NFA Chapter
- (2) Riverside NFA Chapter

DISTRICT IV

- (1) George Washington Carver NFA Chapter

DISTRICT VI

- (1) Whittemore NFA Chapter
- (2) Tomlinson NFA Chapter

RESOURCE-USE EDUCATION

To stimulate the teaching of conservation at various grade levels in the schools of the state three workshops were held for elementary and high school teachers during the year. Commission personnel provided instruction in forestry and the use of state park facilities in resource-use education workshops held at the University of South Carolina and at Columbia College.

In addition to the workshops mentioned above, forestry and state park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation. Particular emphasis was again placed on state park trails as effective "outdoor classrooms."

The resource-use education movement has stimulated interest in the out-of-doors as an aid to effective teaching, and provides an excellent opportunity for teaching conservation concepts.

The S. C. State Commission of Forestry continued its cooperation with the South Carolina Advisory Council on Conservation Education, composed of representatives of conservation agencies and groups, State Department of Education, teachers and others.

TALKS

Personnel of the State Commission of Forestry give talks about forestry and state parks before many groups. The use of color slides with many of the talks helps make them much more interesting and more effective.

During the year a total of 325 talks were made by Commission personnel to 11,924 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. As one example of the number of people reached, during the past year 18,048 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting, and preventing fires was usually explained or demonstrated.



By popular demand, SMOKEY AND HIS FRIENDS returned to South Carolina during fair season. The special fully animated exhibit, a part of the Cooperative Forest Fire Prevention Campaign, was used in Florence, Spartanburg, and Columbia.

EXHIBITS

The Forestry Commission welcomes the opportunity to place exhibits in fairs and other places where educational forestry and state park displays are requested. Exhibits provide an excellent means of placing forestry and state park information before the people.

Throughout South Carolina personnel of the Commission of Forestry placed exhibits at 85 locations which were seen by an estimated 1,059,765 citizens of the state.

The following is a record of where forestry and state park exhibits were displayed:

Exhibits at State and County Fairs

Location of Exhibit— County Fair	Type of Exhibit	Est. Attend.
Greenville	Judge Smokey Diorama	38,500
Greenwood	Smokey's Commandments	45,000
Pickens	Judge Smokey Diorama	4,340
Anderson	Planting Diorama	60,000
Anderson (N)	Planting Diorama	20,000
Florence	Smokey and His Friends	140,000
Chester	Judge Smokey Diorama	4,500
Camden	Forest Values	10,000
Newberry	Smokey's Commandments	24,000
Orangeburg	Planting Diorama	15,000
Spartanburg	Smokey and His Friends	48,000
Sumter	Commercial Woods of S. C.	20,000
Marion	Judge Smokey Diorama	7,500
Pageland	Planting Diorama	6,000
Laurens	Judge Smokey Diorama	26,000
Union	Judge Smokey Diorama	30,000
Beaufort	Judge Smokey Diorama	20,000
Berkeley	Smokey's Commandments	800
Lancaster	Common Trees of S. C.	10,000
Dillon	Commercial Woods of S. C.	5,000
Rock Hill	Planting Diorama	25,000
Bishopville	Judge Smokey Diorama	6,000
McCormick	Planting Diorama	3,000
Abbeville	Judge Smokey	6,300
Chester (N)	Commercial Woods of S. C.	2,500
Loris	Commercial Woods of S. C.	2,000
TOTAL		579,440

State Fairs

Columbia	Smokey Bear and His Friends	150,000
Columbia (N)	Smokey Bear and His Friends	95,000
TOTAL		245,000

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

Columbia (Statewide Conference for School Guidance Counselors) Automatic Slide Projector "Forestry as a Career".....	300
Pageland (Chamber of Commerce) Watermelon Festival Parade—Smokey Bear with Ranger's Truck	2,600
Columbia (Shandon Methodist Church)—Field trip	75
Bennettsville (Marlboro Co-op Fair)—Commercial Woods of S. C.	3,000
Darlington (Pee Dee Co-op Fair)—Fire Control and Management	5,000
Marion (Marion Co-op Fair)—Fire Control and Management	2,000
Conway (Horry Co-op Fair)—Forest Planting and Fire Control	10,000
Georgetown (Pleasant Hill Community Fair)—Fire Control and Management	1,000
Greenville (Flower Show—Memorial Auditorium)—Smokey's Commandments	1,300
North (North Garden Club)—Conservation display	500
Hampton (Hampton County's 20th Annual Watermelon Festival) Parade—Smokey Bear with Ranger's truck	10,000
Manning (Manning Flower Show)—Smokey's Commandments	500
Columbia (Camping Show)—Enjoy Camping in Your State Parks	1,000
Lancaster (Public Library)—Native Trees of Lancaster County	5,000
Columbia (Fire Prevention Parade)—Medium Unit with Smokey Bear	50,000
Shaw Air Force Base (Fire Prevention Parade)—Ranger's Truck with Smokey Bear ..	10,000
Bishopville (Lee County Court House)—Insect and Disease Exhibit	5,000
St. Matthews (REA Fair)—Forest Management	3,000
Hillcrest School Fair—Forest Management	4,500
Gaffney (Bank of Gaffney)—Forest Management	2,000
Charleston (County Ranger's Office)—Insect Display	1,000
Florence (Fire Prevention Parade)—Smokey Bear with Ranger's Truck	2,000
Lake City (Fire Prevention Parade)—Smokey Bear with Ranger's Truck	2,000
Dillon (Shriner's Parade)—Smokey Bear on Float	10,000
Hampton (Christmas Parade)—Smokey Bear on Float	7,000
Newberry (Christmas Parade)—Smokey Bear on Float	10,000
Allendale (Christmas Parade)—Smokey Bear on Float	3,000
Walterboro (Christmas Parade)—Smokey Bear with Ranger's Truck	2,500
Saluda (Christmas Parade)—Smokey Bear on Float	1,200
Hardeeville (Christmas Parade)—Smokey Bear on Float	3,500
Holly Hill (Christmas Parade)—Smokey Bear on Float	3,000
Aiken (School Program)—Large Smokey Costume	1,000
Barnwell (Christmas Parade)—Smokey Bear on Float	5,000
Bamberg (Christmas Parade)—Smokey Bear on Float	3,500
Branchville (Christmas Parade)—Smokey Bear on Float	1,000
Edgefield (Christmas Parade)—Smokey Bear on Float	6,000
Lexington (Christmas Parade)—Smokey Bear on Float	2,500
Dillon (Christmas Parade)—Smokey Bear on Float	5,000
Loris (Christmas Parade)—Smokey Bear on Float	9,000
Latta (Christmas Parade)—Smokey Bear on Float	2,500
Marion (Christmas Parade)—Smokey Bear on Float	10,000
Aynor (Christmas Parade)—Smokey Bear on Float	2,500
Bowman (Christmas Parade)—Smokey Bear on Float	1,500
Branchville (Christmas Parade)—Smokey Bear on Float	3,500
Pelion (Christmas Parade)—Smokey Bear on Float	1,000
Aiken (Christmas Parade)—Smokey Bear on Float	2,000
Swansea (Christmas Parade)—Smokey Bear on Float	500
Cheraw (Christmas Parade)—Smokey Bear on Float	10,000
New Ellenton (Christmas Parade)—Smokey Bear on Float	500
Kingstree (Christmas Parade)—Smokey Bear on Float	800
Williston (Christmas Parade)—Smokey Bear on Float	1,000
Summerton (Christmas Parade)—Smokey Bear on Float	300
Bath—Langley (Christmas Parade)—Smokey Bear on Float	1,000
Manning (Clarendon Azalea Show)—Management	750
Pond Branch (Christmas Parade)—Smokey Bear on Float	500
St. Matthews (Christmas Parade)—Smokey Bear on Float	2,000
Olar (Christmas Parade)—Smokey Bear on Float	1,000
Total	236,325
GRAND TOTAL	1,059,765

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperate generously with the Commission by providing air time for many programs on forest fire prevention and other phases of forestry, and on the educational and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that a total of 411 radio and TV programs on state parks and forestry were presented during the year. This number does not include the many hundreds of recorded programs and film spots carried by radio and television stations, as made available through the National and Southern Cooperative Forest Fire Prevention Campaigns, and spot announcement material prepared by the Commission of Forestry for special use during periods of high fire danger.

TRAINING

The Commission continually strives to improve its educational techniques and methods. A good training program makes more effective and interesting every news release, every program, talk, and slide lecture used to promote better conservation practices throughout the state.

NEWS RELEASES AND ARTICLES

Newspapers provide opportunities to present the conservation education program of the Commission and excellent press coverage helped place forestry and state parks news before the people regularly.

During the year Commission personnel prepared 665 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, such as during serious fire situations, news items are given orally to individual papers and to the wire services.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or prepared mats illustrating the story were often included with the feature.

Commission personnel in every county of the state prepare news articles. In this way, news is localized.

BOYS' FORESTRY CAMP

The fifteenth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the year. Ninety-two young men representing every county in the state attended the week-long camp. One boy from each county was selected by each county ranger from postal cards written by boys interested in attending the camp.

On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

An interesting program of study and recreation characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm as well as recreational opportunities offered by state parks.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies and associations, and other organizations, groups, and agencies which published material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park installations with the Commission of Forestry. The Commission's exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program. The members of the S. C. Tree Farm Committee during the year were :

Chairman—

H. F. Lathrop, Lightsey Brothers, Miley

Members—

Harvey Rhettberg, Poinsett Lumber & Mfg. Co., Pickens

T. M. Folger, Taylor-Colquitt Company, Spartanburg

Charles H. Flory, State Forester, Columbia

George B. Nutt, Clemson Agricultural College, Clemson

James M. Mann, Consulting Forester, Columbia

Chas. E. Millwood, International Paper Co., Georgetown

Martyn Cavanaugh, Champion Paper & Fibre Co., Newberry

A. C. Crews, Union Bab-Camp Paper Corp., Hampton

Bobby L. Womack, Catawba Timber Co., Clinton

Donald C. Dixon, Tree Farmer, Lancaster

James E. Neal, West Virginia Pulp & Paper Co., Clinton

James Chester, District Manager, AFPI, serves as Secretary to the State Tree Farm Committee.

As of June 30, 1962, there were 513 Tree Farms in the state, comprising 1,952,133 acres.

STATE PARKS

"Outdoor recreation produces many benefits. It provides the healthful exercise necessary for individual physical fitness. It promotes mental health. It offers spiritual values, for being in the outdoors can be a deeply moving experience. It is valuable for education in the world of nature. These benefits are not to be justified on a cost accounting basis. Like education, outdoor recreation is one of those elements of the full life that should be made available to the general public. But there are also important economic effects in the provision of outdoor recreation, and they should not be overlooked."

—Outdoor Recreation For America
(ORRRC Report)—January 1962

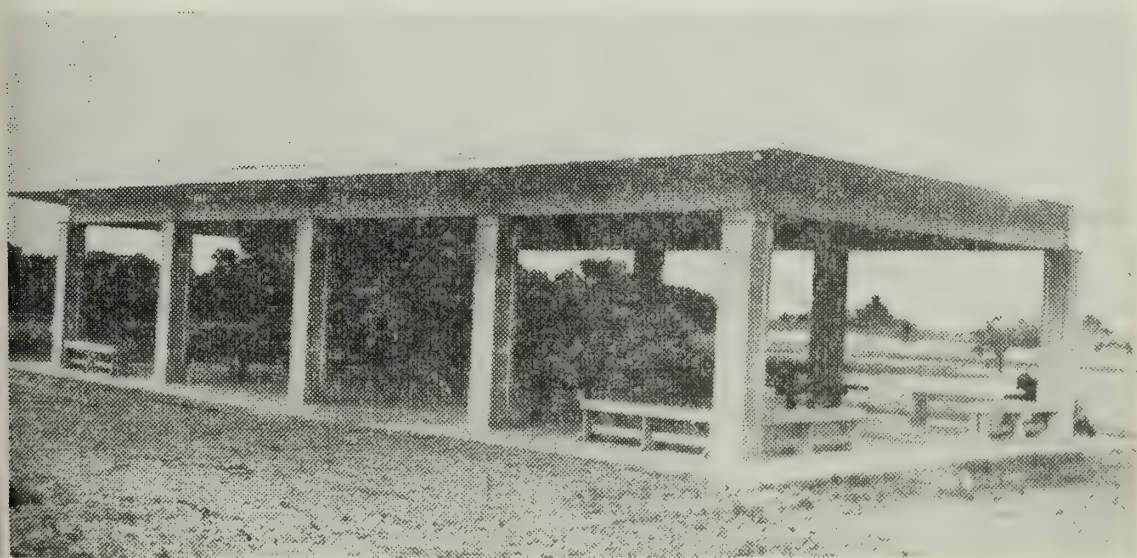
SUMMARY

There was little of the unusual in the State Park operations for the fiscal year ending June 30, 1962.

Again the parks played host to more than three million visitors; family camping increased everywhere; a host of routine repair jobs engaged maintenance crews throughout the year; and the Negro area of the new Huntington Beach State Park was opened to visitors on June first.

The appropriations for the operating budget was approximately the same as last year; however, no funds were made available for capital improvements or expansions.

There was little turnover in personnel.



This modern picnic shelter is one of the facilities in the Negro area of Huntington Beach State Park which was opened to visitors on June 1. Other facilities include a combination concession stand and bath-houses, water system and parking areas.

It has now been twenty-six years since the very first park visitor began the statistical record of "park visitation." On July 1, 1936, the freshly painted gates at the entrance to Myrtle Beach State Park were officially opened and "state park use" began.

Two years earlier the 312-acre tract had been donated to the state by the Myrtle Beach Farms Company for the development of a state park. A CCC camp was moved in and a state park began to evolve. During the 12 month period ending June 30, 1962, some three-quarter million visitors were attracted to this beach park—the most heavily used in the system.

Although Myrtle Beach was the first state park open to visitors, Cheraw actually had the first acquisition of an area for a state park, when a 700 acre tract was purchased with funds raised by public subscriptions and donated to the state. The 700 acres were later increased to 7,361 by means of a gift from the Federal Government of a portion of the old Sandhills Resettlement acquisition and designated as a "recreational demonstration area."

Cheraw, the largest of all State Park areas, was under construction for about five years. Every facility—lake, picnic grounds, family camp grounds, recreation building, family cabins, organized group camps—is to be found at Cheraw. There are 116 buildings together with miles of roads and water and electric distribution lines in this oldest state park.

Cheraw was first opened to visitors in July, 1939—three years after the opening of Myrtle Beach. By this time Aiken, Barnwell, Chester, Edisto Beach, Givhans Ferry, Oconee, Paris Mountain and Poinsett were open and playing host to some 500,000 visitors each year. The land and water within these ten parks measured 15,500 acres.

Today the number has grown to twenty-two state park areas for white citizens, six for Negroes, six state historical sites and one wayside park, with an annual attendance of more than three million visitors, and a total acreage of 48,663 acres.

In another 26 years the state's population will continue to increase, and so will the needs for outdoor recreation.

ATTENDANCE

Every year since 1955 more than three million visitors have been counted in the state park and historical areas.

Attendance at Myrtle Beach exceeded that of any other park. Three-quarters of a million individuals visited the popular sea-side resort. Six other parks were closely grouped in the one-quarter million attendance bracket, and were in order: Hunting Island, (276,720); Kings Mountain, (259,168); Paris Mountain, (241,417); Cheraw, (230,540); Sesquicentennial, (225,546); and Table Rock, (206,789).

Attendance at the State Parks for Negroes were: Hunting Island, 28,100; Mill Creek, 21,443; Pleasant Ridge, 18,179; Campbells Lake, 16,580; Greenwood, 15,895; and Huntington Beach, for one month only, 12,224.

These visitors traveled in 601,325 automobiles, 170,240 of which had out-of-state licenses.

Picnicking was the most popular activity as 1,123,047 were counted around tables and grills. A half-million park visitors went swimming; 165,505 individuals made up the family camping groups and the family vacation cabins were occupied a total of 5,915 days. A detailed table of attendance is included at the end of the State Park section writeup.



Picnicking was the most popular activity as attendance at South Carolina state parks again topped the three million mark.

APPROPRIATIONS

The operating budget for the fiscal year amounted to \$394,746, approximately the same as last year. Nationally, expenditures by state park agencies increased by 26 per cent.

There was no new appropriation for capital improvements or expansions. Some previously designated funds, however, are still in hand for development of Huntington Beach State Park.

With an attendance in South Carolina of 3,186,416, and an operational expenditure of \$394,746, a cost of 12.3 cents per park visitor is calculated, compared to the national average of 22 cents.

Funds will be needed to begin the development of the three areas on the Hartwell Reservoir in Anderson County, the two areas on Clark Hill, and the continued development of Croft State Park and Huntington Beach State Park.

FAMILY VACATION CABINS

When the first state parks were built more than 25 years ago, provisions were made to provide means for South Carolina families to spend a vacation in state park surroundings. Cabins were incorporated in the original plans and their use has been popular through the years. South Carolina families may choose between the mountains and seashore, or visit some of the midland parks, having cabins on the lakes and rivers.

Sixty-six cabins have been built in nine state parks—most of them furnished for a family of six. Approximately one thousand families spend all or a part of their vacations each year in these convenient and inexpensive facilities.

The table below shows the distribution of the cabins and their rental rates.

PARK, COUNTY	No. of Cabins	Weekly Rate	Out-of-Season Weekend Rate
Cheraw, Chesterfield	9	\$30.00-\$40.00	\$10.00-\$13.50
Givhans Ferry, Dorchester ..	5	\$30.00	\$10.00
Hunting Island, Beaufort ..	4	\$45.00	\$15.00
Myrtle Beach, Horry	5	\$45.00	\$15.00
Oconee, Oconee	20	\$24.00-\$40.00	\$ 8.00-\$16.50
Poinsett, Sumter	6	\$30.00-\$46.00	\$10.00-\$15.00
Santee, Orangeburg	2	\$30.00	\$10.00
Table Rock, Pickens	12	\$33.00-\$46.00	\$11.00-\$15.00

Facilities For Negro Families:

PARK, COUNTY	No. of Cabins	Weekly Rate	Out-of-Season Weekend Rate
Hunting Island, Beaufort	2	\$30.00	\$10.00
Pleasant Ridge, Greenville	2	\$30.00	\$10.00 -

All cabins have electric lights, electric stoves, electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin user must bring blankets, bed linens and towels, and silverware, such as knives, forks and spoons. The interior of the cabins have been upgraded by colorful curtains being placed in all cabins.

During the period June 1st through Labor Day summer rates are in effect and cabins are rented for a period of one week only. After Labor Day and through the following May cabins are available at reduced rates, and for weekend use. Many cabins are winterized and comfortable throughout the year.

To give every family an equal opportunity to obtain a cabin for a summer vacation, cabin assignments are made in a public drawing. All South Carolina applications are considered first; then out-of-state requests are reviewed.

Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, P. O. Box 357, Columbia, S. C., and must be postmarked no later than March 1.

GROUP CAMPS

There are seven group camps for organized agency use:

Camp Forest and Juniper at Cheraw State Park.

Camps Cherokee and York at Kings Mountain State Park.

Camp Buckhorn at Paris Mountain State Park.

Camps Burnt Gin and Mill Creek at Poinsett State Park.

Mill Creek is for Negro use, while the others are for white campers.

The demand for these facilities is heavy and it is difficult to accommodate all applications. For the 1962 summer season reservations began on June 3 and continued solid until Labor Day. These 91 days at 640 per day gives a total of about 58,000 camper days available to youth of the state for outdoor adventure.

Equipment and facilities are similar in all camps and include complete kitchens and mess hall, sleeping quarters, infirmary, toilet and shower buildings, lakefront, and parking and play areas.

The rental charge is 45 cents per person per day with certain minimums in effect. Out-of-season use is limited to early fall and late spring as facilities are not adapted to winter use.



Family camping continued to increase as families from throughout the United States and Canada made use of family camping areas which have been developed in 17 South Carolina state parks.

FAMILY CAMPING

The number of families seeking adventure in the great out-of-doors continues to increase and each year more and more spaces have to be added and new areas developed to serve these groups.

These campers come to South Carolina from every state and from the Canadian provinces, and their numbers have more than doubled within the past five years.

Family campers - 1957-58	74,542
1958-59	111,377
1959-60	126,306
1960-61	132,089
1961-62	165,505

Sixteen state parks and one wayside area have designated areas for family camping with developed facilities such as water and electrical connections, tables, latrines and garbage collection. In other parks space is found for the casual overnight camper.

The distribution of these facilities is shown in the following table:

FAMILY CAMPING AREAS AND FACILITIES

PARK—Location	FACILITIES							
	No. of Units	Flush Toilet	Showers	Electrical Connections	Water Connections	Tables	Miles to Gas and Grocery	Other Facilities
AIKEN—18 miles E. Aiken	4	*	*	x	x	x	3	1 2 3 4
BARNWELL—3 miles S. Blackville	8	x	*	x	x	x	2	1 2 3 4
CHERAW—4 miles S. Cheraw	18	x	x	x	x	x	2	1 2 3 4
CHESTER—3 miles SW. Chester	6	x		x	x	x	2	2 3 4
COLLETON WAYSIDE—12 miles N. Walterboro	4	x		x	x	x	1	2 4
GIVHANS FERRY—15 miles W. Summerville ...	10	*	*	x	x	x	1	1 2 3 4
HUNTING ISLAND—16 miles E. Beaufort	36	x	*	x	x	x	4	1 2 4
GREENWOOD—17 miles E. Greenwood	25	*	*	x	x	x	3	1 2 3 4
KINGS MOUNTAIN—12 miles N. York	20	x	x	x	x	x	1	1 2 3 4
LITTLE PEE DEE—12 miles S. Dillon	10	x	*	x	x	x	6	1 2 3 4
MYRTLE BEACH—3 miles S. Myrtle Beach	150	x	x	x	x	x	2	1 2 4
OCONEE—8 miles NW. Walhalla	20	x	*	x	x	x	2	1 2 3 4
POINSETT—18 miles SW. Sumter	10	x	x	x	x	x	9	1 2 3 4
RIVERS BRIDGE—6 miles W. Ehrhardt	10	x	*	x	x	x	5	1 2 3 4
SANTEE—5 miles W. Santee.....	15	x	*	x	x	x	4	1 2 3 4
SESQUICENTENNIAL—13 miles N.E. Columbia	25	*	*	x	x	x	3	1 2 3 4
TABLE ROCK—16 miles N. Pickens	26	x	*	x	x	x	4	1 2 3 4

SYMBOLS: x—"Yes"

*—Available at Bathhouse

1—Swimming

2—Fishing

3—Boating

4—Hiking and Trails

A "Unit" is a space designed to accommodate from two to six people.

Areas "Open" from 8 a.m. to 10 p.m., except from 8 a.m. to 8 p.m. in Dec., Jan. and Feb.

Pets must be kept on leach.

No advance reservations.

CHARGES: Camping charges at above parks \$1.50 per night; check-out time 10 a.m. Limited

camping facilities are available at 8 other areas at a cost of \$1.00 per night.

ACQUISITIONS AND DEVELOPMENTS

The first state park area was acquired in early 1934. Now twenty-three state parks, six historical sites and one wayside park stretch from the mountains to the sea.

From the beginning, areas were planned and developed for both white visitors and for Negro park users.

The table following gives names, acreages, location, date of establishment of acquisition and date opened to visitors of the several state parks, and the state historical sites.

Park Name	Acreage	Location (County)	Date Estab. or Acquired	Date Opened to Visitors
Aiken	1,067	Aiken	July 1934	Aug. 1936
Andrew Jackson	360	Lancaster	Apr. 1953	Mar. 1957
Barnwell	307	Barnwell	July 1937	Aug. 1939
Cheraw	7,361	Chesterfield	Mar. 1934	July 1939
Chester	523	Chester	May 1935	July 1939
Colleton Wayside	35	Colleton	May 1938	June 1940
Croft	7,088	Spartanburg (Under Construction)	May 1949	
Edisto ..	1,255	Charleston (Closed Feb. 1956)	Feb. 1935	June 1937
Givhans Ferry	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood	914	Greenwood	Apr. 1938	July 1940
Hunting Island	5,00	Beaufort ..	July 1938	June 1941
Huntington Beach	2,500	Georgetown (Negro Area Only)	May 1960	June 1962
Kings Mountain	6,141	York-Cherokee	Nov. 1934	June 1940
Lee	2,839	Lee	June 1935	June 1941
Little Pee Dee	835	Dillon	June 1951	June 1955
Myrtle Beach	312	Horry	Aug. 1934	July 1936
Oconee	1,165	Oconee	July 1935	June 1937
Paris Mountain	1,275	Greenville	Apr. 1935	June 1937
Pleasant Ridge	300	Greenville	Sep. 1950	June 1955
Poinsett	1,000	Sumter	Aug. 1934	Aug. 1936
Rivers Bridge	390	Bamberg	May 1945	July 1945
Santee	2,364	Orangeburg	Jan. 1942	June 1949
Sesquicentennial	1,445	Richland	Aug. 1937	June 1940
Table Rock	2,860	Pickens	May 1935	June 1940
	48,581			

STATE HISTORICAL SITES

Name	Acreage	Location (County)	Date Estab. or Acquired
Eutaw Springs Battleground Site ..	2.70	Orangeburg	April 1963
Ft. Watson Battle Site & Indian Mound	2.80	Clarendon	May 1, 1948
General Francis Marion Burial Site	9.65	Berkeley	March 7, 1962
Old Dorchester Town Site ..	20.56	Dorchester	February 11, 1960
“Rose Hill,” Governor Gist Mansion	41	Union	July 8, 1960
General Thomas Sumter Burial Site	5	Sumter	August 18, 1941
	81.71		

STATE HISTORICAL SITES

A “State Historical Site” is an area of historical significance that has been acquired by the state and turned over to the Division of State Parks by the Legislature for administration and maintenance.

Appropriations, under Item 3 of the General Appropriations Bill, are made for this administration, separate from Item 2—the State Parks appropriation.

For the fiscal year 1961-62 an amount of \$12,461 was made available for historical operations and restorations, plus special appropriations of \$10,000 for “Rose Hill,” the Governor Gist Mansion, and \$5,000 for Old Dorchester.

Some of the accomplishments during the year included:

Old Dorchester—Continued clearing of heavy undergrowth and maintenance of grass areas; road improvements; erection of lot markers in the town site; and designing of formal entrance gates. These are in process of being erected at this time. A caretaker resides on the area.

Eutaw Springs Battleground—a general clean-up and upgrading of entire area, including the replacement of a wire fence along the north boundary of the property. A part-time caretaker has been employed.

Fort Watson Battle Site and Indian Mound—A general clean-up and upgrading of entire area, and employment of a part-time caretaker.

General Francis Marion Burial Site—Completion of negotiations whereby this property, together with access road, was deeded to the Commission by Flack-Jones Lumber Company. A new road and control fence is in process of construction. When area is again open for visitation, a part-time caretaker will be employed.

General Thomas Sumter Burial Site—General maintenance and supervision. Two upright grave stones, broken by vandals, were replaced with new flat stones, and the old broken pieces preserved by embedding them in concrete.

Rose Hill—It was necessary to do considerable repairs to Rose Hill, the home of South Carolina’s secession governor, William H. Gist.

In the interior of the Mansion it proved necessary to replace all flooring and floor timbers on the first floor, after treatment of the whole area against termites. Old flooring was found and the original appearance of the one-hundred-year-old house was not affected. All walls on the first floor have been repaired, woodwork repaired and restored and the entire area painted.

The dining room has been completely restored and furnished with original period pieces.



Rose Hill, the home of South Carolina's secession governor, William H. Gist, received considerable repairs. The dining room has been completely restored and furnished with original period pieces. The mansion is open for visitors everyday except Monday throughout the year.

Heat, by means of gas burning fireplaces of artificial wood logs and coals, has been installed. During the repairs to the interior of the Mansion, electric wiring was done. This was a complicated job, as it was necessary to "hide" any installations of present-day conveniences.

The extensive gardens have been worked and cultivated.

Fortunately a great deal of outside help was available for the restoration work. Assistance was provided by Union County for a new avenue road, parking area and grading work. A very active acquisition committee found many authentic pieces of furniture and fixtures for refurnishing the Mansion, and most of these antique pieces were gifts to the project. The Carolinas Chapter of the American Institute of Interior Designers cooperated by lending expert advice and by authenticating furnishings. They also made contributions of funds and furniture.

The Mansion is open to visitors each day except Monday throughout the year.

SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and Post Office Address of Park Superintendent	Picnicking	Outdoor Fire Place	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Group Camps †	Museum	Trailer & Tent Camping ‡
AIKEN Windsor, S. C., RFD.....	x	x	x	x	x	x	x		x				x		x			x
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x	
BARNWELL Blackville, S. C.	x	x	x	x	x	x	x				x		x		x			x
CHERAW Cheraw, S. C. { White Area. Negro Area.	x x	x x	x	x x	x x	x x	x x	x			x		x x	x	x	x		x x
CHESTER Chester, S. C.	x	x	x			x	x				x				x			x
COLLETON WAYSIDE PARK Canadys, S. C.	x	x				x	x											x
CROFT Spartanburg, S. C., RFD.....	(Under Construction)																	
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																		
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x	x			x		x		x			x
GREENWOOD Ninety Six, S. C., RFD. { White Area. Negro Area.	x x	x x	x	x	x	x x	x x						x		x			x x
HUNTING ISLAND Frogmore, S. C. { White Area. Negro Area.	x x	x x		x x	x x		x x	x				x	x		x			x
HUNTINGTON BEACH { White Area.... Pawleys Island, S. C. { Negro Area....	x x	x x		x x	x x		x											x
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x	x		x	x	x	x						x		x	x		x
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x	x		x		x		x		x			
LITTLE PEE DEE Dillon, S. C.	x	x	x	x	x	x	x											x
MYRTLE BEACH Myrtle Beach, S. C.	x	x		x	x		x	x		x	x		x		x			x
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x	x			x	x	x		x			x
OLD DORCHESTER HISTORICAL Summerville, S. C.																		
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x	x						x	x	x	x		
PLEASANT RIDGE (For Negroes) Cleveland, S. C.	x	x		x	x	x	x	x					x					
POINSETT Wedgfield, S. C. { White Area. Negro Area.	x x	x x	x	x x	x x	x x	x x	x				x	x x		x x	x x		x
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x	x		x	x	x	x				x		x		x		x	x
ROSE HILL HISTORICAL Union, S. C.																	x	
SANTEE Ellorree, S. C., RFD.....	x	x		x	x	x	x	x					x		x			x
SESQUICENTENNIAL Columbia, S. C., RFD.....	x	x		x	x	x	x						x		x			x
TABLE ROCK Pickens, S. C., RFD.....	x	x		x	x	x	x	x			x	x	x		x			x

* Where no regular barbecue pit and shelter are established, temporary arrangements can be made at all Parks.

† Two camps each at Cheraw, Kings Mountain and Poinsett.

‡ Where no developed camping areas are established, temporary arrangements can be made at all parks.

UNDEVELOPED AREAS

There are sites for state parks on which no progress has been made beyond the planning stage.

These areas are of great importance, for, as populations increase and open lands diminish, it is well to have under title these fine acreages for future use. While the state park facilities are fairly adequate for today, every survey indicates a pressing need for additional space and facilities in the early future.

Clark Hill—McCormick County

Bakers Creek area—510 acres.

Hickory Knob area—1,183 acres.

Hartwell Reservoir—Anderson County

Sadler Creek Area—394 acres.

River Forks area—182 acres.

Andersonville Island area—455 acres.

RECOMMENDATIONS

The Division of State Parks recommends:

1. An operating budget of approximately \$436,000 to adequately operate the several state parks and to maintain equipment and facilities; and an operating budget of approximately \$24,000 to maintain the half-dozen state historical sites.
2. The appropriation of funds for capital improvements and development at the following areas:
 - a. Huntington Beach State Park in Georgetown County, both Negro and white areas;
 - b. Continuing the development of the large Croft State Park area in Spartanburg County;
 - c. Begin the development of the areas for state parks on the Clark Hill and Hartwell Reservoirs in McCormick and Anderson counties.
3. That funds be appropriated to further a program of interpretation of the natural, historical and archeological features of the state parks and state historical sites to the end that visitors may more fully understand and appreciate these features.

S. C. STATE COMMISSION OF FORESTRY—DIVISION OF STATE PARKS
SUMMARY OF PARK USE — JULY 1, 1961 – JUNE 30, 1962

NAME OF PARK	Cabin Days Occupied	Cabin Occupants	Group Camps	Tents and Trailers	Fishermen	Picnickers	Swimmers	Out-of-State Cars	Total Cars	Total Visitors
Aiken	127	623	.....	1,057	3,304	40,221	8,302	540	14,621	54,678
Andrew Jackson .....	.....	.....	.....	.....	.....	10,671	.....	2,569	7,200	23,611
Barnwell .....	.....	.....	.....	1,083	1,246	42,335	9,444	517	17,124	75,197
Cheraw	701	4,859	15,310	4,670	15,976	77,615	83,515	11,455	47,550	230,540
Campbell Lake (N) .....	.....	.....	.....	.....	709	9,939	4,388	837	3,277	16,580
Chester .....	.....	.....	.....	118	1,346	13,977	.....	1,105	9,518	38,735
Givhans Ferry	360	2,184	.....	3,301	.....	27,941	8,518	1,487	10,377	41,082
Greenwood .....	.....	.....	.....	8,582	11,229	58,039	8,859	1,803	40,259	193,040
Greenwood (N) .....	.....	.....	.....	228	2,295	7,220	185	185	3,052	15,895
Hunting Island	573	3,208	.....	9,286	24,985	77,655	74,820	15,030	67,755	276,720
Hunting Island (N)	31	186	.....	.....	3,895	8,320	7,254	815	7,025	28,100
Huntington Beach (N) .....	.....	.....	.....	.....	406	3,969	2,659	382	3,006	12,224
Kings Mountain .....	.....	.....	26,478	4,648	1,210	93,013	12,462	37,774	56,802	259,168
Lee	38	205	.....	170	2,940	10,450	4,015	248	6,265	25,100
Little Pee Dee .....	.....	.....	.....	3,574	3,622	26,050	10,732	1,666	17,800	54,347
Myrtle Beach	726	4,300	.....	97,406	22,136	68,844	76,110	63,836	18,439	751,676
Oconee	1,593	9,670	.....	8,180	666	34,570	30,534	852	30,585	122,362
Old Dorchester .....	.....	.....	.....	.....	.....	.....	.....	458	5,406	15,847
Paris Mountain .....	.....	.....	4,480	1,178	.....	123,250	21,720	1,597	58,907	241,417
Pleasant Ridge (N) .....	.....	.....	.....	84	472	8,985	1,183	296	4,409	18,179
Poinsett	17	104	.....	2,581	240	74,337	15,799	3,213	24,588	99,004
Mill Creek (N)	196	1,495	.....	.....	328	8,127	10,117	96	4,237	21,443
Rivers Bridge .....	.....	.....	.....	989	711	22,925	12,427	386	10,948	40,735
Santee	186	1,076	.....	4,250	9,315	24,955	12,039	2,258	14,906	67,504
Sesquicentennial .....	.....	.....	.....	4,350	1,664	105,755	45,269	11,483	56,438	225,546
Table Rock .....	.....	.....	.....	9,450	2,017	124,253	40,647	4,393	51,561	206,789
Colleton	1,367	8,873	.....	320	.....	19,571	.....	4,959	9,270	30,897
TOTALS	5,915	36,783	53,637	165,505	110,712	1,123,047	500,813	170,240	601,325	3,186,416

(N) — Negro

STATISTICS ON STATE PARK OPERATIONS IN TWELVE SOUTHERN STATES
1961

State	Area of State— (acres)	Area of State Parks— (acres)	No. of State Parks	Population of State (1960)	Acres of State Parks Per 1,000 Population	Attendance at State Parks	EXPENDITURES			Operational Cost Per Park Visitor
							Operations and Maintenance	Capital Improvements	Total	
Alabama	33,029,760	42,333	46	3,226,740	13	2,850,532	\$ 375,777	\$ 1,695	\$ 377,472	13.2
Arkansas	33,986,560	19,341	16	1,302,161	10.7	2,533,763	290,950	90,000	380,950	11.5
Florida	37,478,400	121,434	51	4,951,560	14.6	3,647,462	1,007,065	622,869	1,629,934	27.6
Georgia	37,680,640	36,836	41	3,943,116	9.2	3,407,411	628,744	293,758	922,502	18.4
Kentucky	25,852,800	36,846	32	3,038,156	11.7	6,000,000	2,273,784	10,187,000	12,460,784	37.9
Louisiana	31,054,720	12,240	18	3,257,022	3.8	1,553,308	646,686	.....	646,686	41.6
Mississippi	30,538,240	13,634	15	2,178,141	6.3	1,135,800	257,143	47,828	304,941	22.6
North Carolina	33,735,680	36,568	12	4,556,155	7.8	1,665,502	464,649	95,452	560,101	27.9
South Carolina	19,375,200	46,248	25	2,382,594	20.4	3,325,276	453,455	81,651	535,106	13.6
Tennessee	27,036,160	132,175	20	3,567,089	36.8	4,175,047	1,168,218	402,363	1,570,581	28
Virginia	26,121,600	28,248	19	3,966,949	6.5	1,112,269	317,507	87,055	404,562	28.5
West Virginia	15,475,840	44,390	25	1,860,421	21.9	1,922,109	1,135,990	1,362,799	2,498,789	59.1
TOTALS	351,865,600	566,293	320	38,230,104	162.70	33,328,479	\$ 9,019,968	\$13,272,470	\$22,292,406	....
AVERAGES	29,322,133	47,191	26.66	3,185,842	13.55	2,777,373	\$ 751,662	\$ 1,106,040	\$ 1,857,700	27.4

ADMINISTRATION

SUMMARY

No state-appropriated funds were provided for salary or wage adjustments and as a result losses of both technical and other personnel continued at an excessive rate. A total of 74 employees resigned during the year of which 65% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and Park program \$3,204,918.60. Of this total the Division of Forestry expended \$2,703,545.23 and the Division of State Parks \$301,373.37 (see Appendix for detailed explanation of funds available and expenditures made). State appropriated funds amounted to \$1,891,540.92 for the Division of Forestry and \$394,746 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 67 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 10 accidents. Of the 10 accidents which occurred, 8 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and assistance of the National Safety Council.

The Commission instituted a safe driving program sponsored by the National Safety Council several years ago. Under this program a driver must operate a vehicle on official business for twelve consecutive months without a preventable accident before entitled to the first year safe driving award. If a preventable accident occurs during the first three years or before the third

year award has been received, the driver's safe driving record is cancelled and he is required to begin again. Should a preventable accident occur after the third year award is received, the driver is penalized and is requested to operate for twelve additional months from the date of accident before entitled to the next year award.

A review of the Commission's employees' safe driving records indicates that 140 of the 390 drivers have operated Commission or privately owned vehicles on official business for a period of one to five years without an accident; 83 for six to ten years; 80 for eleven to fifteen years; 80 for sixteen years and over.

COMMISSION PURCHASING

As in the past, the purchase of supplies, tools and equipment for the Commission, where possible and feasible, was made on a bid basis. This applies to both local and central office purchases. Field supervisory personnel were encouraged to make bulk purchases, thus reducing the number of purchases, and simplifying fiscal procedure. A total of 1,630 requisitions were received and 1,369 purchase orders were issued during the year.

Visual inventories were made during the year of all equipment in use by the Commission. Necessary adjustments in property records in the central and field offices were made to include property acquired or condemned. The estimated value of tools and equipment owned by the Commission is \$1,953,181. In addition, the Commission has real property and improvements now estimated to be worth \$13,292,084.

PERSONNEL

A large number of Commission employees continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Twelve per cent of the total personnel resigned during the year; county unit personnel were the highest percent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

PERSONNEL LOSSES
DIVISION OF FORESTRY
Resignations—1961-62

Assistant State Foresters	2	
Foresters	2	
		<hr/>
Technical		4
District Radio Technicians	1	
Clerk-Stenographers	6	
Nursery Foremen	2	
Rangers	2	
Wardens	13	
Towermen	23	
Tractor Operators	9	
Heavy Suppression Unit Operators	1	
		<hr/>
Non-Technical		57
		<hr/>
Total		61

Losses Due to Promotions or Change in Positions

Assistant State Foresters	1	
Management Assistants	1	
Fire Control Assistants	1	
District Foresters	3	
Foresters	12	
Rangers	1	
Wardens	2	
Tractor Operators	4	
		<hr/>
Total		25
		<hr/>
Total Losses, Division of Forestry		86

DIVISION OF STATE PARKS

Resignations—1961-62

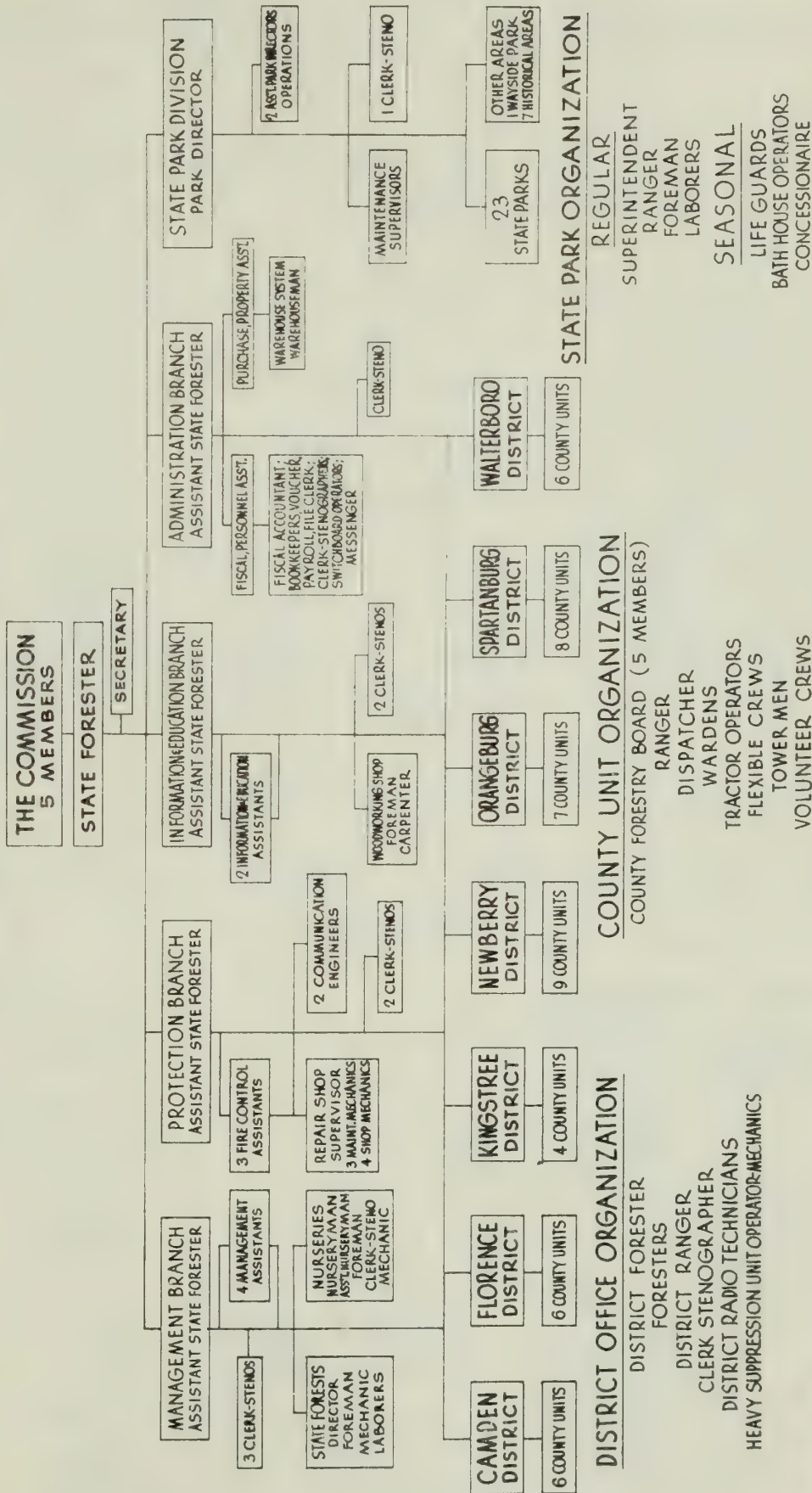
Custodians	1	
Caretakers	2	
Rangers	4	
Laborers	5	
Foremen	1	
	<hr/>	
Total		13

Losses Due to Promotions or Change in Positions

Bookkeepers	1	
Rangers	1	
Laborers	1	
	<hr/>	
Total		3
		<hr/>
Total Losses—Division of State Parks		16
		<hr/>
Grand Total—Personnel Losses		102

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

ORGANIZATION CHART



APPENDIX
FINANCIAL STATEMENT
SOUTH CAROLINA STATE COMMISSION OF FORESTRY
July 1, 1961-June 30, 1962

RECEIPTS

Division of Forestry:

Balance from 1960-61—Radio Comm. Fund	\$ 93.95
Balance from 1960-61—Forestry Comm.—Specials	4,145.21
State Appropriation—Operating	1,891,540.92
Forestry Commission—Specials—C.M. Law, Sec. 2	393,100.00
Forestry Commission—Specials—Coop. Farm Management	60,606.95
Forestry Commission—Specials—Watershed Projects	19,790.09
Forestry Commission—Specials—Agricultural Stabilization	22,445.03
Forestry Commission—Specials—Conservation Program	6,000.00
Forestry Commission—Specials—Title IV Program	75,074.00
Counties and Timber Firms	7,234.86
State Forests (S.O.E.P.)	303,627.83
Construction of Forestry Center—(1 Loan)	37,000.00
Nurseries	234,666.59
Marking and Tallying Timber	10,766.19
Miscellaneous .....	.84
Radion Communications Project	65.00
<hr/>	
Total Receipts—Forestry	\$3,066,157.46
Less Receipts Deposited to Credit of State Revenue Account	259,632.81
<hr/>	
Total Receipts Available for Expenditure	2,806,524.65
Total Expenditures	2,703,545.23
<hr/>	
Balance—Division of Forestry	102,979.42*

Division of State Parks

Balance from 1960-61 Forests and Parks— Beach Village	\$ 1,692.68
Balance from 1960-61 Forests and Parks— Santee Boat Landing	713.22
Balance from 1960-61 Forests and Parks— Givhans Ferry (Sale of Land)	500.00
Balance from 1960-61 Forests and Parks— Timber Sale	32,823.93
Balance from 1960-61 Parks Improvements	35,038.76
Balance from 1960-61—Myrtle Beach Fishing Pier	3,686.88
Balance from 1960-61—Myrtle Beach Swimming Pool	2,752.63
Balance from 1960-61—Specials—Rose Hill Plan- tation Caretaker and Maintenance, Painting, Repairs and Equipment	10,000.00
Balance from 1960-61—Special—Fort Dorchester	5,000.00
Balance from 1960-61—Special—Huntington Beach	35,000.00
State Appropriation—Operating	394,746.00
State Appropriation—Historical Area	12,461.00
Donations	205.00

Forests & Parks Fund—Hunting Island Deposits	2,303.25	
Forests & Parks Fund—Santee Boat Landing	1,404.88	
Forests & Parks Fund—Croft Timber Sale	15,632.48	
Myrtle Beach Fishing Pier	34,419.34	
Myrtle Beach Swimming Pool	9,236.70	
Cabin Rentals	29,567.62	
Concession Stands	1,899.71	
Bathhouse & Swimming	42,356.15	
Boat Rentals	2,860.09	
Picnic Shelters ; Recreation Bldgs ; Trailer Camps	31,224.07	
Group Camps	19,309.17	
Miscellaneous	4,801.46	
		<hr/>
Total Receipts—Parks		729,635.02
Less Receipts Deposited to Cr. of State		
Revenue Account		132,018.27
		<hr/>
Total Receipts Available for Expenditure		597,616.75
Total Expenditures		501,373.37
		<hr/>
Balance—Division of State Parks		96,243.38*

EXPENDITURES

Administrative & Technical	666,036.94	
State Forestry Nurseries	416,394.57	
State Forests Projects	246,086.00	
Fire Protection	1,261,627.08	
Construction of Forestry Center	432.00	
Chesterfield, Richland & Sumter Counties 25%		
Receipts from State Forests	75,906.96	
Payment of Loan to State Sinking Fund and		
Property	37,031.68	
		<hr/>
Total—Division of Forestry		2,703,545.23
Total—Division of State Parks		501,373.37
		<hr/>
GRAND TOTAL—Expenditures		3,204,918.60

RECAPITULATION

Funds Available:

Division of Forestry	2,806,524.65	
Division of State Parks	597,616.75	
		<hr/>
		3,404,141.40

Expenditures:

Division of Forestry	2,703,545.23	
Division of State Parks	501,373.37	
		<hr/>
		3,204,918.60
		<hr/>
		199,222.80**

Balance:

* Forestry: Forestry Commission—Specials	46,611.42	
Construction of Forestry Center	56,368.00	
* Parks: Forests & Parks Fund	35,816.55	
Parks Improvements	35,038.76	
Myrtle Beach Fishing Pier	2,657.22	
Myrtle Beach Swimming Pool	736.94	
Fort Dorchester—Special	4,828.54	
Huntington Beach—Special	17,165.37	
		<hr/>

199,222.80

TABLE 1 — PROTECTION PERSONNEL
FISCAL YEAR 1961-62

UNIT	Organized Personnel					Volunteer Personnel	GRAND TOTAL
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	101	106
Aiken	1	4	2	5	12	423	435
Allendale	1	2	1	3	7	58	65
Anderson	1	2	1	3	7	202	209
Bamberg	1	2	1	2	6	56	62
Barnwell	1	2	2	2	7	180	187
Beaufort	1	3	2	4	10	110	120
Berkeley	1	4	2	4	11	325	336
Calhoun	1	2	1	2	6	54	60
Charleston	1	4	3	3	11	416	427
Cherokee	1	1	1	1	4	121	125
Chester	1	3	1	1	6	233	239
Chesterfield	1	3	1	4	9	166	175
Clarendon	1	3	2	3	9	212	221
Colleton	1	4	3	5	13	304	317
Darlington	1	2		3	6	616	622
Dillon	1	2	1	2	6	159	165
Dorchester	1	4	2	3	10	206	216
Edgefield	1	2	1	1	5	99	104
Fairfield	1	4	1	3	9	531	540
Florence	1	4	2	4	11	426	437
Georgetown	1	4	2	4	11	306	317
Greenville	1	3	1	4	9	640	649
Greenwood	1	2	1	2	6	148	154
Hampton	1	3	1	3	8	100	108
Horry	1	5	2	4	12	1,081	1,093
Jasper	1	3	2	2	8	369	377
Kershaw	1	3	2	6	12	300	312
Lancaster	1	3	1	2	7	303	310
Laurens	1	3	1	2	7	358	365
Lee	1	2	1	3	7	174	181
Lexington	1	3	2	5	11	211	222
McCormick	1	1	1	1	4	90	94
Marion	1	3	2	3	9	219	228
Marlboro	1	3	2	3	9	180	189
Newberry	1	2	1	2	6	92	98
Oconee	1	2	1	3	7	82	89
Orangeburg	1	5	3	5	14	329	343
Pickens	1	3	1	4	9	231	240
Richland	1	5	2	4	12	418	430
Saluda	1	2	1	1	5	123	128
Spartanburg	1	3	1	4	9	369	378
Sumter	1	3	2	3	9	389	398
Union	1	2	1	1	5	218	223
Williamsburg	1	5	2	4	12	410	452
York	1	2	1	4	8	264	272
TOTALS	46	134	68	138	386	12,432	12,818

TABLE 2 — SUMMARY OF FIRES BY MONTHS
July 1, 1961 - June 30, 1962

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July	31	0.8	162.9	5.3
August	28	0.8	127.6	4.6
September	58	1.6	251.3	4.3
October	311	8.5	1,326.6	4.3
November	357	9.7	2,308.1	6.5
December	442	12.0	3,866.7	8.7
January	185	5.0	1,431.2	7.7
February	702	19.1	9,617.9	13.7
March	567	15.5	5,335.2	9.4
April	578	15.8	7,777.8	13.5
May	366	10.0	3,319.3	9.1
June	43	1.2	270.4	6.3
TOTALS	3,668	100.0	35,795.0	9.8

TABLE 3 — SUMMARY OF FIRES BY CAUSES — FISCAL YEAR 1961-62

UNIT	Lightning		Campfire		Smokers		Debris Burning		Incendiary		Machine Use		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	1	0.4			6	42.9	8	59.2					1	0.8	16	103.3
Aiken	8	52.2	7	10.8	41	177.6	37	226.0	3	12.6	4	16.6	50	123.0	150	618.8
Allendale	1	326.0			9	62.7	7	30.2	13	45.2	1	17.0	1	0.6	32	431.7
Anderson					28	173.0	21	210.4	2	0.8			9	36.8	60	421.0
Bamberg					5	10.4	6	55.4	3	22.1	1	1.0	2	9.5	17	78.4
Barnwell	2	16.8	2	32.4	26	282.0	12	291.8	5	21.9			6	26.4	53	671.3
Beaufort			1	2.0	7	91.5	12	269.9	16	363.0			2	1.5	38	727.9
Berkeley	2	11.0			62	977.6	40	295.0	109	1,910.6			3	44.0	216	3,238.2
Calhoun	2	37.2	1	2.0	6	58.9	23	193.9	1	6.6					10	104.7
Charleston	2	117.0	6	43.6	94	406.5	5	16.5	15	142.9	1	0.8	27	98.1	168	1,002.8
Cherokee					4	14.5	3	16.7	6	14.0	5	18.5	3	4.5	23	63.0
Chester	1	0.6	2	45.1	15	122.1	21	162.7	4	6.5	17	233.5	2	0.6	62	571.1
Chesterfield	18	247.1	3	16.2	8	187.8	10	432.6	3	108.0	4	30.6	11	82.1	57	1,104.4
Clarendon			8	87.0	36	164.7	38	267.7	54	518.7			1	0.2	137	1,038.3
Colleton			3	43.5	33	155.4	32	183.7	32	305.6	2	1.2	6	20.9	108	710.3
Darlington	2	11.5	3	10.6	42	207.7	34	300.7	10	5.9	3	4.6	10	97.7	104	638.7
Dillon	1	0.1	2	1.0	17	61.9	25	92.5	4	22.6	2	0.9	9	19.8	60	198.8
Dorchester	2	23.0	3	15.0	60	1,679.3	19	280.6	11	649.6			5	8.5	101	2,656.0
Edgefield	1	5.6	1	3.6	13	18.6	11	43.2			2	56.8	6	12.3	34	140.1
Fairfield	6	13.3	3	11.2	17	180.7	28	73.1	4	44.2	18	163.8	2	2.3	78	488.6
Florence			3	20.5	36	145.4	53	328.0	64	631.1	6	23.2	14	45.7	176	1,193.9
Georgetown	3	26.0	2	1.1	29	115.0	29	513.7	27	585.5	3	21.0	6	83.3	99	1,345.6
Greenville			2	10.1	53	211.2	51	306.0	29	9.7	1	6.0	23	35.9	159	578.9
Greenwood			3	45.7	15	142.4	10	22.7	3	1.9	5	16.8	9	6.9	45	236.4
Hampton	2	26.7	7	29.0	13	128.4	17	260.1	1	12.0	1	4.0	2	12.0	43	412.2
Horry	1	22.0	1	23.0	28	324.3	32	314.5	43	888.7	1	4.0	23	166.2	129	1,742.7
Jasper	1	0.2	1	4.5	31	262.2	33	1,455.4	37	880.2			2	5.7	106	2,610.0
Kershaw	1	6.4	7	72.2	16	85.2	26	589.0	8	11.7	1	1.8	18	181.9	80	995.2
Lancaster	1	0.9	5	39.8	22	103.9	22	85.9			4	64.3	9	22.7	63	317.5
Laurens			2	5.0	30	174.9	23	253.3	10	29.5	5	10.7	10	42.9	78	511.2
Lee					24	90.8	10	128.0	8	74.4	4	48.8	18	181.9	80	995.2
Lexington	1	1.0	5	29.0	25	97.4	13	19.0	1	1.0	2	2.6	13	35.0	60	185.0
McCormick	1	0.6			4	12.3	4	9.9	2	2.6	6	27.6	6	9.0	23	62.0
Marion			1	0.5	9	24.2	13	39.8	4	231.0	1	0.2	2	10.8	30	306.5
Marlboro	2	0.2			12	69.7	22	150.6	20	306.1	7	18.8	9	46.7	72	562.1

Newberry	11	31.9	7	25.9</
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**TABLE 4 — SUMMARY OF FIRES BY FIRE CLASS
FISCAL YEAR 1961-62**

UNIT	Class A No.	Class B No.	Class C No.	Class D No.	Class E No.	TOTAL NO.
Abbeville .....	..	13	3	..	..	16
Aiken	23	114	13	..	..	150
Allendale	3	23	5	1	..	32
Anderson	8	46	5	1	..	60
Bamberg	1	15	1	..	..	17
Barnwell .....	..	41	11	1	..	53
Beaufort .....	..	23	13	2	..	38
Berkeley	9	147	56	4	..	216
Calhoun	1	5	4	..	..	10
Charleston	5	138	25	..	..	168
Cherokee .....	..	23	..	..	..	23
Chester	3	43	16	..	..	62
Chesterfield	6	35	13	3	..	57
Clarendon	5	106	26	..	..	137
Colleton	14	71	23	..	..	108
Darlington	20	73	10	1	..	104
Dillon	12	42	6	..	..	60
Dorchester	3	66	24	7	1	101
Edgefield	5	27	2	..	..	34
Fairfield	1	65	12	..	..	78
Florence	24	127	24	1	..	176
Georgetown	7	72	17	3	..	99
Greenville	54	101	3	1	..	159
Greenwood	3	38	3	1	..	45
Hampton	1	32	10	..	..	43
Horry	15	88	23	2	1	129
Jasper	7	69	26	1	3	106
Kershaw .....	..	64	15	1	..	80
Lancaster	10	47	6	..	..	63
Laurens	9	55	14	..	..	78
Lee	1	43	1	1	..	46
Lexington	7	49	4	..	..	60
Marion	2	24	3	1	..	30
Marlboro	11	48	12	1	..	72
McCormick	4	18	1	..	..	23
Newberry	1	19	1	..	..	21
Oconee	14	26	3	..	..	43
Orangeburg	1	108	61	3	..	173
Pickens	16	34	2	..	..	52
Richland	9	104	31	2	..	146
Saluda	3	18	1	..	..	22
Spartanburg	1	74	9	..	..	84
Sumter	8	74	23	1	..	106
Union .....	..	47	5	..	..	52
Williamsburg	25	86	56	4	..	171
York	7	46	12	..	..	65
TOTALS	359	2,627	634	43	5	3,668

UNIT	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	2	1.4	5	12.5	6	45.7	1	2.0	2	23.0	16	40.2	3	20.8	2	32.2	7	24.9	1	0.4
Aiken	...	...	...	...	...	...	32	66.4	26	77.7	11	37.7	4	18	17	137.7	10	59.4	10	71.2
Allendale	...	...	...	...	...	...	3	0.6	6	13.0	3	5.9	2	10	4	40.2	2	7.6	3	346.0
Anderson	...	...	...	...	...	...	3	7.2	7	199.0	2	5.5	2	4	13	102.5	7	7.8	12	41.7
Bamberg	...	...	...	...	...	...	2	6.8	1	3.0	2	4.1	2	4	2	16.9	4	16.8	...	...
Barnwell	1	15.0	...	...	...	...	6	32.3	6	44.4	2	5.5	11	12	9	33.8	3	11.2	2	6.8
Beaufort	1	25.0	...	...	...	...	3	2.1	2	3.0	5	43.0	2	13	5	43.0	3	20.0	2	48.0
Berkeley	...	...	...	...	...	...	9	63.5	4	17.5	34	535.5	18	73	34	508.2	28	430.1	15	79.8
Calhoun	...	...	...	...	...	...	1	1.2	12	33.6	23	84.0	25	49	1	2.0	2	6.9	3	58.2
Charleston	...	...	...	...	...	...	1	1.2	12	33.6	23	84.0	25	49	1	2.0	2	6.9	3	58.2
Cherokee	1	0.5	...	...	...	...	3	6.5	5	6.0	1	8.0	...	2	1	4.0	3	12.0	3	18.0
Chester	1	2.0	...	...	...	...	13	49.2	11	111.7	7	0.2	...	1	4	39.4	15	297.9	10	143.9
Chesterfield	2	12.0	...	...	...	...	3	15.2	4	9.0	12	22.6	...	2	6	331.9	39	406.8	20	294.1
Clarendon	...	...	...	...	...	...	3	6.2	8	33.4	12	210.5	13	29	18	72.9	10	233.0	13	131.6
Colleton	1	20.0	...	...	...	...	4	18.6	4	7.2	27	192.1	6	26	21	184.0	10	116.0	8	37.7
Darlington	4	0.7	...	...	...	...	1	41.2	10	14.2	14	24.5	4	9	20	305.5	16	133.5	6	18.4
Dillon	...	...	...	...	...	...	3	10.5	5	2.9	11	19.2	6	7	11	53.2	11	30.3	4	23.4
Dorchester	...	...	...	...	...	...	3	106.7	9	168.5	18	971.0	11	39	9	102.0	12	733.1	8	54.5
Edgefield	...	...	...	...	...	...	5	4.4	8	12.9	1	2.2	1	8	6	32.0	1	0.7	3	6.8
Fairfield	1	2.0	...	...	...	...	14	79.9	17	68.5	6	41.0	...	6	3	28.0	8	44.8	12	106.8
Florence	...	...	...	...	...	...	10	24.4	13	33.1	51	270.0	10	27	20	203.6	28	128.7	13	42.0
Georgetown	...	...	...	...	...	...	3	4.8	2	19.7	9	132.6	7	29	18	281.6	17	265.6	9	136.2
Greenville	1	0.1	...	...	...	...	17	28.7	30	53.2	4	7.3	3	15	41	59.6	27	345.8	20	41.4
Greenwood	...	...	...	...	...	...	10	11.0	5	11.9	3	6.3	...	6	4	7.8	8	116.3	3	15.7
Hampton	1	19.0	...	...	...	...	2	11.0	5	11.9	3	6.3	2	14	5	26.6	5	66.1	5	18.7
Horry	3	31.9	...	...	...	...	3	2.9	14	89.3	24	130.6	5	22	15	99.1	27	1002.6	11	244.0
Jasper	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kershaw	2	8.0	...	...	...	...	7	35.9	7	346.5	8	96.4	...	13	19	260.2	9	95.1	4	39.1
Lancaster	...	...	...	...	...	...	3	16.0	6	17.2	4	0.8	...	8	13	137.0	16	157.6	11	157.6
Laurens	1	0.2	...	...	...	...	10	158.1	9	31.8	6	34.4	...	10	12	42.8	17	206.4	10	21.0
Lee	...	...	...	...	...	...	2	1.2	2	3.3	6	11.1	2	14	7	26.9	5	40.2	7	23.2
Lexington	1	0.5	...	...	...	...	7	8.2	10	13.5	5	7.8	2	4	14	63.2	8	74.4	7	5.4
Marion	...	...	...	...	...	...	1	0.4	4	15.6	2	52.7	...	5	7	14.0	6	216.3	1	2.0
Marlboro	...	...	...	...	...	...	7	28.9	4	5.5	1	1.0	...	10	25	314.2	15	99.5	4	26.2
McCormick	1	0.2	...	...	...	...	4	8.6	4	21.1	3	6.6	...	1	4	21.2	3	1.2	2	0.4
Newberry	...	...	...	...	...	...	1	8.8	2	3.0	2	11.4	...	3	2	2.8	2	13.8	2	10.3
Orangeburg	...	...	...	...	...	...	4	3.3	3	7.1	4	2.0	...	8	5	6.4	11	15.3	6	9.4
Pickens	1	8.0	...	...	...	...	6	22.1	11	92.4	22	208.7	...	59	28	545.4	20	399.6	18	153.2
Richland	3	9.4	...	...	...	...	7	3.6	2	15.1	3	7.1	...	8	12	26.2	16	37.4	3	4.6
Saluda	...	...	...	...	...	...	14	64.7	17	233.8	6	124.6	...	28	19	156.5	25	324.6	11	116.6
Spartanburg	...	...	...	...	...	...	5	4.1	4	20.2	2	11.6	...	4	1	5.1	2	3.4	2	1.7
Sumter	2	6.8	...	...	...	...	11	45.7	9	35.6	2	18.0	...	8	17	82.9	15	301.4	22	210.6
Union	...	...	...	...	...	...	10	15.1	10	89.7	10	108.2	...	20	21	236.3	21	289.3	7	169.6
Williamsburg	...	...	...	...	...	...	13	29.0	9	29.0	3	8.5	...	2	6	35.7	3	5.5	10	58.7
York	...	...	...	...	...	...	9	124.8	4	15.5	33	104.3	...	42	32	384.0	33	646.4	7	55.7
TOTALS	31	162.9	28	127.6	58	251.3	311	1326.6	357	2308.1	442	3866.7	185	702	567	5,335.2	578	7,777.8	366	3,319.3
																				270.4

TABLE 6 — CLASSIFICATION BY CAUSES
FISCAL YEAR 1961-62

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	73	2.0	1,032.0	14.1
Campers	104	2.8	845.6	8.1
Smokers	1,158	31.6	9,224.7	8.0
Debris Burning	1,002	27.3	10,145.6	10.1
Incendiary	755	20.6	11,238.6	14.9
Machine Use	146	4.0	1,288.6	8.8
Miscellaneous	430	11.7	2,019.9	4.7
TOTALS	3,668	100.0	35,795.0	9.8

TABLE 7—CAUSES OF FIRES—FIVE-YEAR-PERIOD
(Percent of Total)

CAUSES	1957-58	1958-59	1959-60	1960-61	1961-62	Average For 5-Year Period
Lightning	1.1	0.4	1.4	0.8	2.0	1.1
Campers	3.1	2.7	2.2	3.0	2.8	2.8
Smokers	27.0	33.0	32.2	32.8	31.6	31.3
Debris Burning	22.2	31.8	32.4	29.7	27.3	28.7
Incendiary	34.7	19.2	19.8	23.8	20.6	23.6
Machine Use	2.6	3.3	4.0	2.2	4.0	3.2
Miscellaneous	9.3	9.6	8.0	7.7	11.7	9.3

**TABLE 8 — SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA
FISCAL YEAR 1961-62**

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent of Area Burned	Average Area Per Fire (Acres)
Abbeville	167,647	16	103.3	.06	6.5
Aiken	401,376	150	618.8	.15	4.1
Allendale	131,400	32	481.7	.37	15.1
Anderson	173,700	60	421.0	.24	7.0
Bamberg	126,000	17	78.4	.06	4.6
Barnwell	74,565	53	671.3	.90	12.7
Beaufort	165,000	38	727.9	.44	19.2
Berkeley	399,091	216	3,238.2	.81	15.0
Calhoun	123,500	10	104.7	.08	10.5
Charleston	271,114	168	1,002.8	.37	6.0
Cherokee	127,800	23	68.0	.05	3.0
Chester	260,023	62	571.1	.22	9.2
Chesterfield	310,000	57	1,104.4	.36	19.4
Clarendon	228,500	137	1,038.3	.45	7.6
Colleton	465,000	108	710.3	.15	6.6
Darlington	208,500	104	638.7	.31	6.1
Dillon	144,100	60	198.8	.14	3.3
Dorchester	268,200	101	2,656.0	.99	26.3
Edgefield	172,363	34	140.1	.08	4.1
Fairfield	338,957	78	488.6	.14	6.3
Florence	293,900	176	1,193.9	.41	6.8
Georgetown	415,600	99	1,345.6	.32	13.6
Greenville	267,800	156	578.9	.22	3.6
Greenwood	198,963	45	236.4	.12	5.3
Hampton	239,500	43	472.2	.20	11.0
Horry	557,600	129	1,742.7	.31	13.5
Jasper	303,400	106	2,610.0	.86	24.6
Kershaw	336,500	80	995.2	.30	12.4
Lancaster	199,400	63	317.5	.16	5.0
Laurens	244,621	78	561.2	.23	7.2
Lee	110,600	46	252.6	.23	5.5
Lexington	291,500	60	185.0	.06	3.1
Marion	224,700	30	306.5	.14	10.2
Marlboro	150,600	72	562.1	.37	7.8
McCormick	144,859	23	62.0	.04	2.7
Newberry	204,949	21	70.6	.03	3.4
Oconee	257,632	43	162.5	.06	3.8
Orangeburg	318,800	173	2,420.7	.76	14.0
Pickens	196,100	52	128.1	.07	2.5
Richland	289,560	146	1,450.3	.50	9.9
Saluda	149,946	22	52.8	.04	2.4
Spartanburg	208,300	84	717.7	.34	8.5
Sumter	205,400	106	1,117.2	.54	10.5
Union	157,894	52	178.1	.11	3.4
Williamsburg	429,800	171	2,471.2	.57	14.5
York	226,300	65	541.6	.24	8.3
TOTALS	11,175,000	3,668	35,795.0	.32	9.8

TABLE 9 — FIVE-YEAR SUMMARY
FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1957-58	11,300,008	2,590	20,253.0	0.18	7.8
1958-59	11,175,000	4,608	39,612.3	0.35	8.6
1959-60	11,175,000	2,958	29,785.8	0.27	10.1
1960-61	11,175,000	4,776	59,969.8	0.54	12.6
1961-62	11,175,000	3,668	35,795.0	0.32	9.8
Five-Year Average	11,200,002	3,720	37,083.2	0.33	10.0

TABLE 10 — S. C. STATE COMMISSION OF FORESTRY 1961-62 SEEDLING DISTRIBUTION
BY LAND CLASSIFICATION

Land Ownership	Trees Planted
Farmers	42,714,475
Other Individuals	9,631,780
Associations and Clubs	672,000
Lumber Companies	2,014,500
Pulp and Paper Companies	4,053,200
Other Industries	5,634,500
Schools	269,880
State Forests	4,743,000
Other State Lands	270,085
Cities, Towns, Counties	25,000
Federal Government	1,864,000
TOTAL	71,892,420

In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

Union Bag-Camp Paper Corporation	470,000
Catawba Timber Company	5,127,450
Continental Can Company	2,535,400
Lightsey Brothers	850,000
St. Regis Paper Company	45,000
R. W. Lloyd	8,000
West Virginia Pulp and Paper Company	2,916,200
Totals	11,952,050
Grand Total, trees planted in S. C. 1961-62	83,844,470

In addition to the above tree planting, a total of 4,278 acres were direct seeded to pine during the fiscal year.

TABLE 11—S. C. STATE COMMISSION OF FORESTRY 1961-62 SEEDLING DISTRIBUTION
BY COUNTY AND SPECIES

COUNTY AND DISTRICT	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red Cedar	Yellow Poplar	Misc. Species	Total	Soil Bank	Other
Chesterfield	158,000	5,622,450	1,496,000	.....	1,000	5,000	8,000	7,290,450	1,002,200	6,288,250
Kershaw	1,099,000	5,372,500	5,000	2,000	2,000	67,000	.....	6,547,500	1,000,500	5,547,000
Lancaster	690,160	285,500	2,000	1,500	2,000	4,500	.....	985,660	122,500	863,160
Lee	270,000	829,000	3,000	.....	3,000	17,000	.....	1,122,000	343,450	778,550
Richland	739,025	1,871,500	24,500	6,025	2,610	15,010	105	2,658,775	141,500	2,517,275
Sumter	558,000	1,699,780	201,000	2,000	.....	21,000	6,000	2,487,780	20,100	2,467,680
Total — Camden District	3,514,185	15,680,730	1,731,500	11,525	10,610	129,510	14,105	21,092,165	2,630,250	18,461,915
Darlington	80,000	896,500	500	.....	3,000	5,000	.....	947,000	50,000	897,000
Dillon	158,500	207,000	1,500	1,000	2,000	.....	.....	374,000	.....	374,000
Florence	100,000	335,100	9,000	500	.....	.....	.....	446,600	1,000	445,600
Horry	479,500	923,200	1,000	.....	.....	10,500	3,000	1,417,500	3,000	1,414,500
Marion	196,000	403,000	4,500	.....	.....	2,000	.....	608,500	.....	608,500
Marlboro	353,000	1,472,100	4,000	500	.....	3,000	.....	1,832,600	478,600	1,354,000
Total — Florence District	1,367,000	4,208,200	20,500	2,000	5,000	20,500	3,000	5,626,200	532,600	5,093,600
Berkeley	289,100	494,700	2,000	.....	.....	3,000	.....	788,800	129,000	659,800
Clarendon	152,000	521,500	12,000	600	.....	.....	.....	686,100	195,000	491,100
Georgetown	390,300	274,600	.....	.....	.....	4,000	1,000	669,900	.....	669,900
Williamsburg	463,200	284,000	.....	500	2,000	.....	.....	749,700	67,500	682,200
Total — Kingstree District	1,294,600	1,574,800	14,000	1,100	2,000	7,000	1,000	2,894,500	391,500	2,503,000
Abbeville	629,000	68,500	21,500	1,800	1,000	4,000	.....	725,800	8,000	717,800
Chester	1,545,500	188,000	.....	.....	.....	15,000	.....	1,748,500	173,500	1,575,000
Edgefield	125,000	164,000	3,000	2,000	.....	10,000	.....	904,000	5,000	899,000
Fairfield	1,295,840	129,000	.....	.....	.....	9,000	.....	1,433,840	386,000	1,047,840
Greenwood	500,500	132,000	.....	3,500	.....	4,600	.....	640,600	2,500	638,100
Laurens	1,561,100	76,500	.....	2,000	5,000	1,000	.....	1,645,600	276,000	1,369,600
McCormick	483,500	45,500	2,000	100	.....	500	.....	531,600	.....	531,600
Newberry	656,500	58,500	.....	1,000	2,000	8,000	.....	726,000	74,500	651,500
Saluda	169,500	38,000	500	.....	.....	1,000	.....	209,000	40,000	169,000
Total — Newberry District	7,566,440	900,000	27,000	10,400	8,000	53,100	.....	8,564,940	965,500	7,599,440

Aiken	227,000	4,948,500	220,000	3,500	4,000	2,000	.....	5,405,000	3,000	5,402,000
Allendale .....	.....	1,832,500	40,000	.....	.....	10,600	.....	1,383,100	133,000	1,250,100
Bamberg	54,500	882,500	30,000	.....	.....	5,000	.....	942,000	97,000	845,000
Barnwell	30,000	2,109,000	30,000	.....	.....	10,000	.....	2,179,000	32,000	2,147,000
Calhoun	39,000	777,000	1,500	500	.....	500	.....	818,500	28,000	790,500
Lexington	178,000	4,230,500	25,000	3,500	2,000	43,500	.....	4,482,500	49,500	4,433,000
Orangeburg	278,500	2,434,500	15,500	3,200	.....	29,000	.....	2,760,700	144,000	2,616,700
Total — Orangeburg District	807,000	6,714,500	332,000	10,700	6,000	100,600	.....	17,970,800	486,500	17,484,300
Anderson	1,408,050	63,500	2,050	29,125	5,000	10,800	17,700	1,536,225	148,000	1,388,225
Cherokee	624,050	3,500	2,000	22,600	.....	72,050	140	724,340	199,500	524,840
Greenville	950,500	5,500	2,000	74,450	3,500	24,200	3,300	1,063,450	168,500	894,950
Oconee	1,193,125	3,760	.....	14,495	210	21,410	28,770	1,261,770	500	1,261,270
Pickens	490,800	3,625	.....	15,780	5,150	10,050	15,000	540,405	16,000	524,405
Spartanburg	2,616,000	51,800	22,200	46,040	3,500	15,000	1,460	2,736,000	781,000	1,975,000
Union	734,000	30,000	.....	.....	.....	1,000	4,000	819,000	109,280	709,720
York	1,206,200	88,200	200	1,700	2,000	27,000	.....	1,325,300	77,500	1,247,800
Total — Spartanburg District	9,272,725	249,885	28,450	204,190	19,360	181,510	70,370	10,026,490	1,500,280	8,526,210
Beaufort .....	.....	260,000	.....	.....	.....	.....	.....	260,000	58,000	202,000
Charleston	361,600	212,000	1,000	.....	.....	.....	.....	574,600	1,000	573,600
Colleton	623,000	998,700	4,000	2,000	.....	2,000	125	1,629,325	63,500	1,563,325
Dorchester	197,000	564,000	21,000	.....	.....	6,000	.....	788,000	34,000	754,000
Hampton	70,000	1,208,500	12,500	.....	.....	6,000	.....	1,297,000	31,000	1,266,000
Jasper	81,000	934,500	21,000	.....	.....	1,000	.....	1,037,500	17,000	1,020,500
Total — Walterboro District	1,332,600	4,177,700	59,500	2,000	.....	15,000	125	5,583,925	207,500	5,379,425
Experimental	60,000	35,000	.....	2,000	.....	.....	33,400	130,400	.....	130,400
STATE TOTAL	25,214,550	43,540,815	2,212,950	243,915	50,970	507,220	122,000*	71,892,420	6,714,130	65,178,290

* Shortleaf	107,610	Magnolia	5	Holy Land Cypress ...	125
Black Pine	5,330	Water Oak	15	Black Walnut	1,035
Scotch Pine	5,810	Dogwood	20	Douglas Fir	95
Red Bud	1,470	Table Mountain Pine .	485		

TABLE 12—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

COUNTY	Seedlings Planted 1929-1961	Seedlings Planted 1961-62	Grand Total Planted To Date	Acres Planted Through June 30, 1962	Acres Needing Planting as of June 30, 1962
Abbeville	17,814,988	865,800	18,680,788	18,681	134,063
Aiken	112,203,569	5,494,000	117,697,569	117,698	253,969
Allendale	37,760,595	2,190,850	39,951,445	39,951	43,120
Anderson	26,092,672	1,625,225	27,717,897	27,718	193,454
Bamberg	23,732,150	972,000	24,704,150	24,704	39,886
Barnwell	68,085,980	2,353,000	70,438,980	70,439	66,094
Beaufort	6,425,345	376,250	6,801,595	6,802	55,267
Berkeley	26,257,535	1,094,800	27,352,335	27,352	108,841
Calhoun	12,799,025	818,500	13,617,525	13,618	47,857
Charleston	5,226,590	751,600	5,978,190	5,978	68,177
Cherokee	10,787,041	1,123,340	11,910,381	11,910	125,186
Chester	19,370,900	2,010,500	21,381,400	21,381	149,858
Chesterfield	48,888,350	7,513,950	56,402,300	56,402	174,263
Clarendon	16,676,115	686,100	17,362,215	17,362	29,242
Colleton	34,521,480	2,712,825	37,234,305	37,234	112,375
Darlington	11,866,920	947,000	12,813,920	12,814	69,611
Dillon	6,107,955	374,000	6,481,955	6,482	32,632
Dorchester	21,935,280	988,200	22,923,480	22,923	82,617
Edgefield	14,074,538	904,000	14,978,538	14,979	55,626
Fairfield	18,671,379	1,581,840	20,253,219	20,253	131,447
Florence	5,693,018	446,600	6,139,618	6,140	53,455
Georgetown	15,888,700	1,075,900	16,964,600	16,965	92,984
Greenville	13,796,754	1,075,450	14,872,204	14,872	205,805
Greenwood	17,164,172	810,100	17,974,272	17,974	58,791
Hampton	30,119,365	2,257,500	32,376,865	32,377	83,141
Horry	16,894,400	1,438,500	18,332,900	18,333	142,842
Jasper	27,195,130	1,527,000	28,722,130	28,722	62,560
Kershaw	73,427,737	8,199,000	81,626,737	81,627	153,604
Lancaster	20,997,643	1,104,660	22,102,303	22,102	119,206
Laurens	31,650,259	1,892,200	33,542,459	33,542	144,277
Lee	9,203,555	1,507,000	10,710,555	10,711	60,731
Lexington	23,543,990	4,482,500	28,026,490	28,026	157,584
McCormick	7,895,325	544,600	8,439,925	8,440	80,505
Marion	6,372,545	608,500	6,981,045	6,981	15,782
Marlboro	17,949,830	2,258,600	20,208,430	20,208	13,548
Newberry	21,079,073	826,000	21,905,073	21,905	90,205
Oconee	12,068,125	1,261,770	13,329,895	13,330	241,546
Orangeburg	41,132,650	3,020,700	44,153,350	44,153	56,123
Pickens	13,154,055	540,405	13,694,460	13,694	185,351
Richland	27,706,968	3,047,625	30,754,593	30,755	127,692
Saluda	7,820,471	209,000	8,029,471	8,029	46,997
Spartanburg	24,967,099	3,001,500	27,968,599	27,969	203,681
Sumter	32,777,612	2,534,780	35,312,392	35,312	56,849
Union	17,730,774	1,569,000	19,299,774	19,300	134,702
Williamsburg	9,784,065	1,249,700	11,033,765	11,034	68,397
York	24,288,826	1,841,700	26,130,526	26,131	197,877
Experimental	4,695	130,400	135,095	135	
Totals	1,090,105,243	83,844,470	1,173,949,713	1,173,948	* 4,827,820

* Information based on 1958 Forest Resources Survey of South Carolina corrected to June 1961.

STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1962 TO JUNE 30, 1963



CHARLES H. FLORY, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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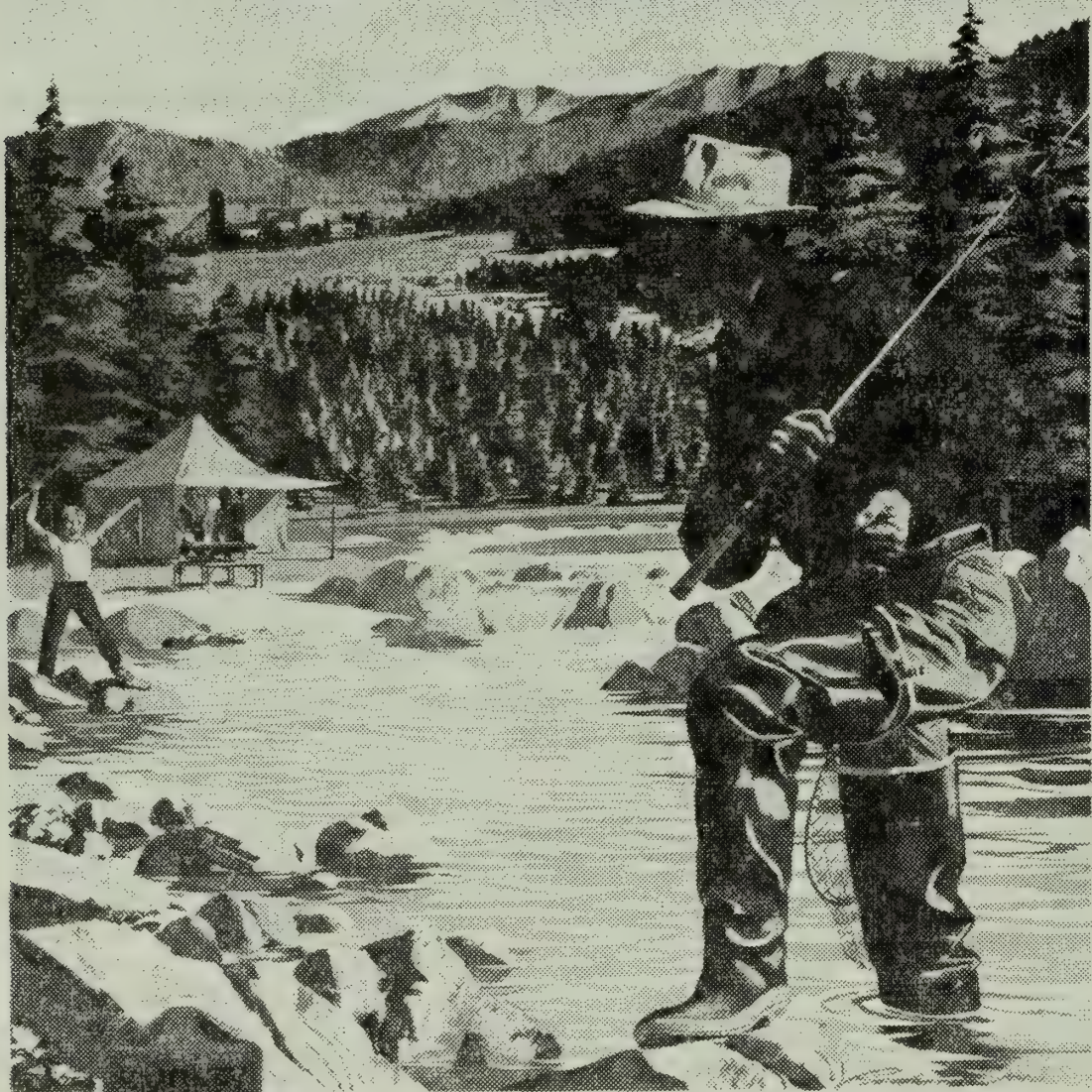
*To Honorable Donald S. Russell, Governor, and to the General
Assembly of South Carolina:*

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual report upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1962 to June 30, 1963.

Respectfully submitted,

STATE COMMISSION OF FORESTRY
Fulton B. Creech, *Chairman.*

You have so many reasons to PROTECT YOUR FORESTS



Remember—
only **YOU** can prevent woods fires!



U.S. Department of Agriculture
Forest Service

With Forest Cooperative Policy and Reclamation Authority
Forest Land is being sold for 10 to 20 years at 5% interest
to qualified persons and their heirs

State Forestry Department

INFORMATION AND EDUCATION

INTRODUCTION

There are five acres of forest land in South Carolina for every man, woman and child, representing a value of nearly \$500 each year to each family in South Carolina. This adds up to nearly 12 million acres of forest land and an annual return of more than a third of a billion dollars in the growing harvesting, manufacturing, transporting and sale of forest products.

Our ever increasing population, with all its needs, makes paramount a continued and increased conservation and development program to make each acre of forest land produce the maximum amount of usable wood fiber as well as provide the necessary recreation facilities to the citizens of the state. Added emphasis should be given the role of the forest in all the needs of man including the vital matter of maintaining a good and plentiful water supply.

Every employee of the Forestry Commission has a part in the educational program. The reach of this program is through press releases, photographs, pamphlets, talks, field demonstrations, films, radio and television programs. Through these media South Carolinians are made aware of the problems that face our state in the maintenance of our state parks that serve millions every year, and the conservation of our natural resources that make possible a livelihood for thousands and comforts and necessities for all.

Every South Carolinian has a stake and a responsibility not only in the present but also in the future of the state parks and forests of South Carolina. It is a fact that the forests of South Carolina support the state's third largest industry. It is also a fact, though, that the state's woodlands are producing at less than half of their potential capacity. When the landowners and people of our state realize the potential value of woodland production and apply practical methods of conservation and wise use, the amount of timber available for commercial use can be more than doubled.

The aim of the Commission's information and education program is to get forestry and state park information to the people of South Carolina so that we may reap the full benefits of wise

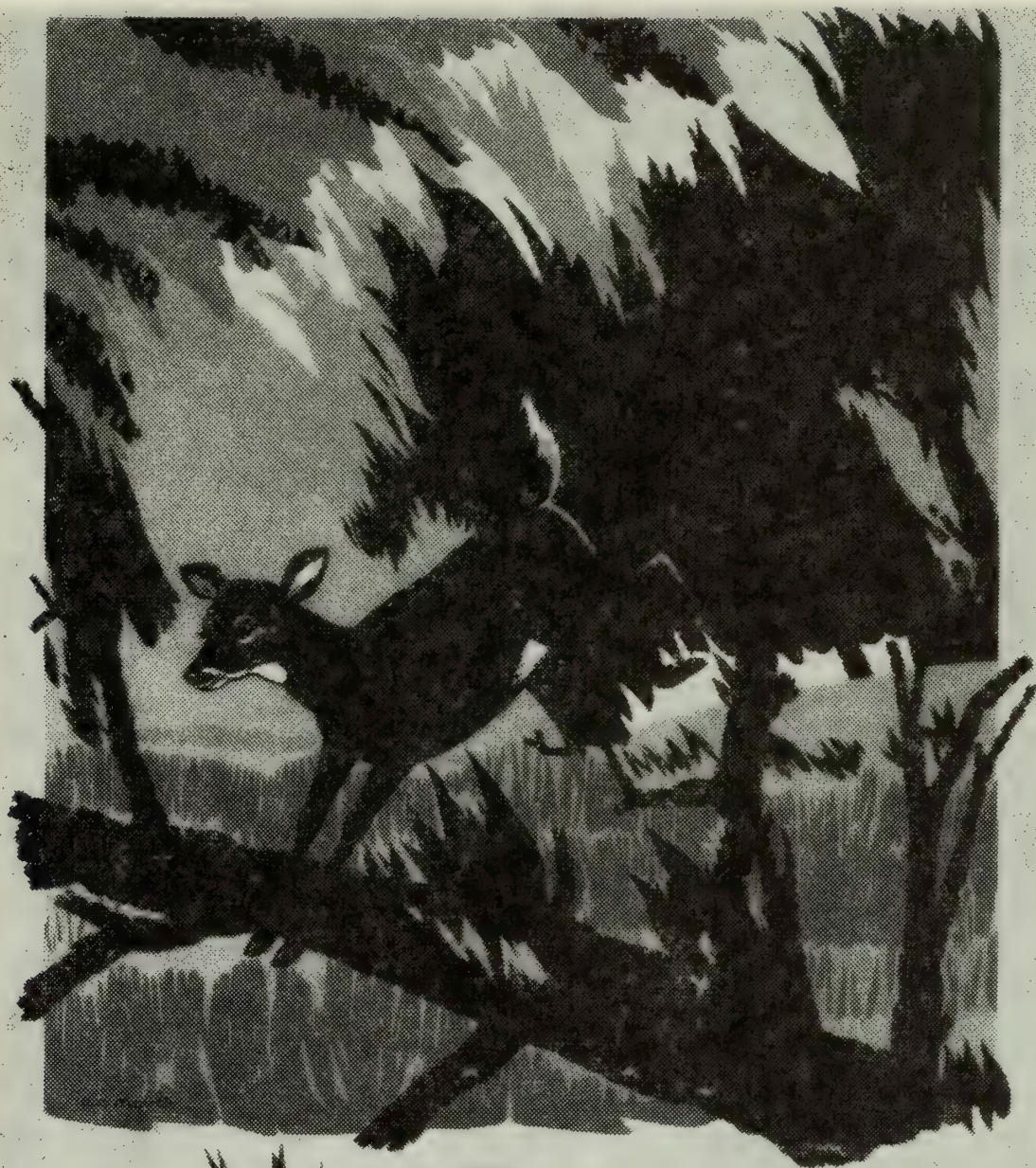
land use. Information and education efforts are keyed to the following points:

1. Forest Fire Protection. More than 4,290 illegal woods fires occur annually in South Carolina, with 99 per cent being caused by people.
2. Unwise cutting practices mean low production and inferior forest products.
3. Trees should be planted on more than five million acres of idle or unproductive land.
4. Improvement of the quality of many existing stands of timber throughout the state by the removal of inferior species as well as low grade and poor-quality trees.
5. Full appreciation should be developed in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of South Carolina and the concept of multiple use of all forest land in the state.

FOREST FIRE PREVENTION

A realistic localized approach to teaching forest fire prevention is used by personnel of the State Commission of Forestry. Particular emphasis is given the damage caused by the average slow-burning quiet fire that so many South Carolinians are accustomed to seeing. Emphasis is placed on the loss of little trees as these fires sweep through our woodlands. Attention is drawn to the protection of little trees as the key to adequate stocking of our woodlands in the future.

A serious effort is made to reach every man, woman, and child within the state of South Carolina through personal contacts; posters and publications available through the national Cooperative Forest Fire Prevention Campaign and the Southern Cooperative Forest Fire Prevention Campaign; and illustrated talks and motion picture showings in community meetings, in private homes, civic club meetings, and school rooms. Wall and pocket calendars, roadside signs and exhibits, and other materials produced by the Commission, broaden the means of bringing the conservation message to each and every citizen in the state.



PREVENT **WILDFIRE** SAVE WILDLIFE

JANUARY 1963						
FIRST MONTH						FIRST MONTH
SUN	MON	TUE	WED	THU	FRI	SAT
1		1	2	3	4	5
16	11 12	14 15	17 18	19 20	21 22	23 24
23 30	18 19	21 22	24 25	26 27	28 29	31
	25 26	27 28	29 30	31		

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

County rangers and wardens help distribute 8,000 wall calendars and 50,000 pocket calendars as a part of South Carolina's forest fire prevention campaign.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

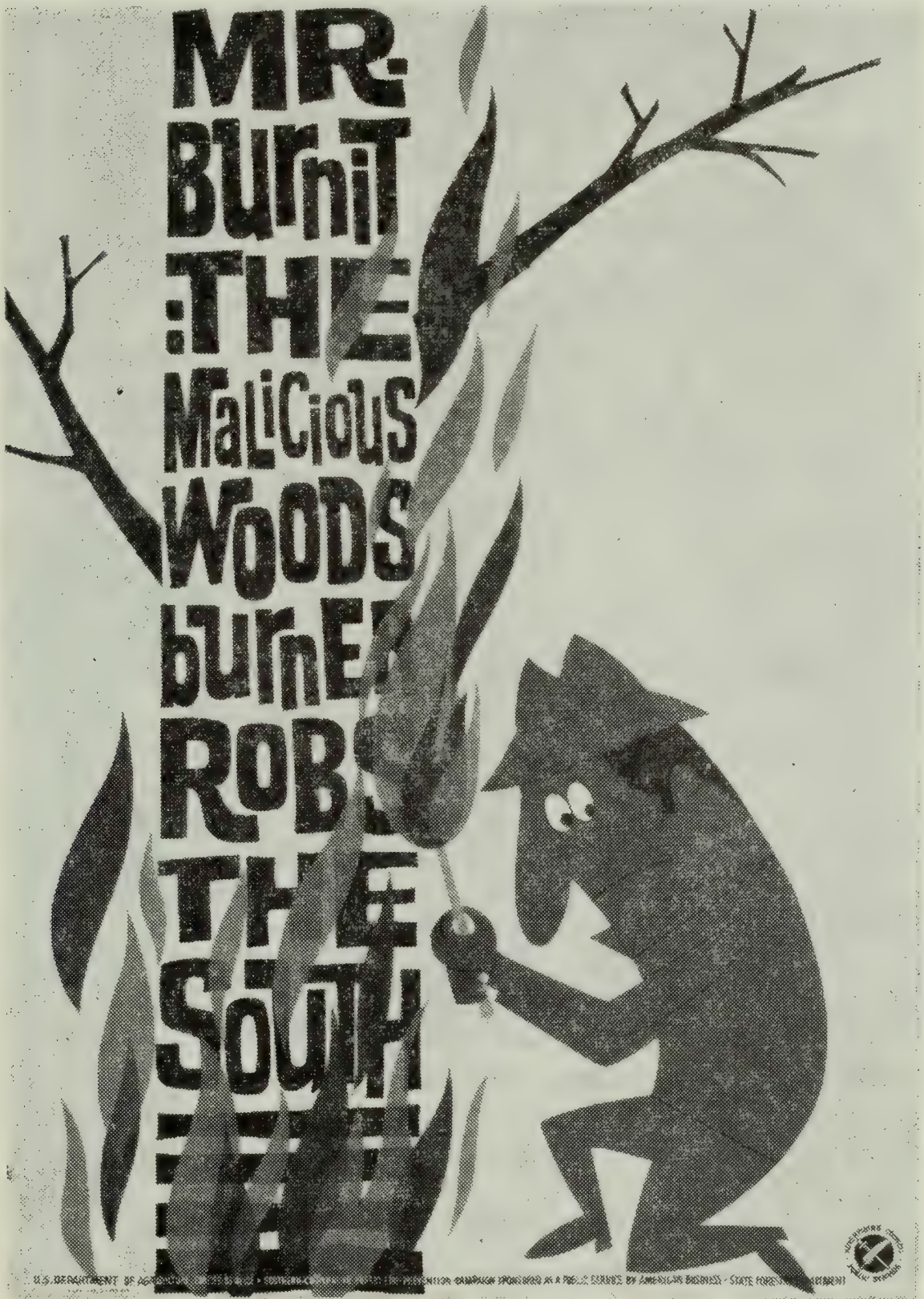
The message of the Cooperative Forest Fire Prevention Campaign, with the support of the media of public information, reaches in one way or another nearly every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, bookmarks, newspaper ads, radio platters, TV spots, films, and other materials to bring forest fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flashlights, wallets, moccasins, T-shirts, scarfs, fishing tackle, archery sets, cigarette snuffers, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, coloring books, comic books, story books, bubble bath, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls, and other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Feeling the need for a more local slant than some of the published materials in the national campaign can provide, the states and the U. S. Forest Service in the Southern region have continued to cooperate in the production of forest fire prevention materials with a Southern flavor. State Forester Flory is a member of the committee guiding the development of this program. The fifth year's operation of the Southern program saw continued production of recorded radio spots, a series of TV spots, news ads, and a poster, all of which are currently being distrib-

uted. The Southern materials supplement the national materials to intensify and strengthen forest fire prevention efforts in South Carolina.



Attention is drawn to the incendiary or intentional fire by "Mr. Burnit" of the Southern Cooperative Forest Fire Prevention Campaign.

SCHOOL PROGRAMS

School children throughout the state received basic information on forestry and forest fire prevention from foresters, rangers, and wardens of the Commission of Forestry. Some 1,618 programs were held in the fifth and sixth grades where either schoolyard demonstrations of fire control equipment and suppression techniques, new flip charts were used, or color slides were shown to help bring the conservation story to the classroom. In these two grades alone, 62,819 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slide programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations mentioned above, all third grade children throughout the state (more than 70,000) received a copy of the booklet "Smokey Bear's Story of the Forest." An equal number of second grade students received coloring sheets with forest fire prevention and conservation messages. Over 65,000 fourth graders received a color comic book entitled "The True Story of Smokey the Bear."

Many forestry movies were also shown in schools, bringing conservation information to students of all grade levels.

The Commission's school programs are designed to add to each child's understanding of the total stewardship of life as we build towards a stronger and more appreciative community of the future. The program gives basic instruction and information to children on the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

FORESTRY DEMONSTRATIONS

During the year 2,552 persons attended 71 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species and timber stand improvement.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson College Extension Service, and other groups and organizations.

SMOKEY BEAR'S STORY OF THE FOREST



Each third grade student in South Carolina received a copy of this eight-page booklet on forest conservation.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies and organizations cooperated to make the observance of 1962 Arbor Day and Conservation Week a success. South Carolina Law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, educators, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 55,000 copies of a special folder were printed and distributed to schools and other interested groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs include tree planting exercises.

A total of 661 Conservation Week and Arbor Day programs were reported, with 71,321 persons attending. Undoubtedly many other programs were held which were not reported to the Forestry Commission.

FIRE PREVENTION ROADSIDE SIGNS

Roadside signs continued to carry the three messages in the following sequence: USE YOUR ASH TRAY—HELP PREVENT WOODS FIRES—PROTECT LITTLE TREES—KEEP SOUTH CAROLINA GREEN. First erected in February 1953, the fire prevention roadside signs appear on highways throughout the state. The Commission hopes to be able to intensify this project from year to year by providing additional signs where thousands of motorists will see these forest fire prevention reminders as they travel the highways.

MOTION PICTURES

Motion pictures are a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with a motion picture outfit complete with screen and sound apparatus. This equipment is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school groups, church gatherings, civic clubs, community organizations, woodland owners, fire control training groups, and others.

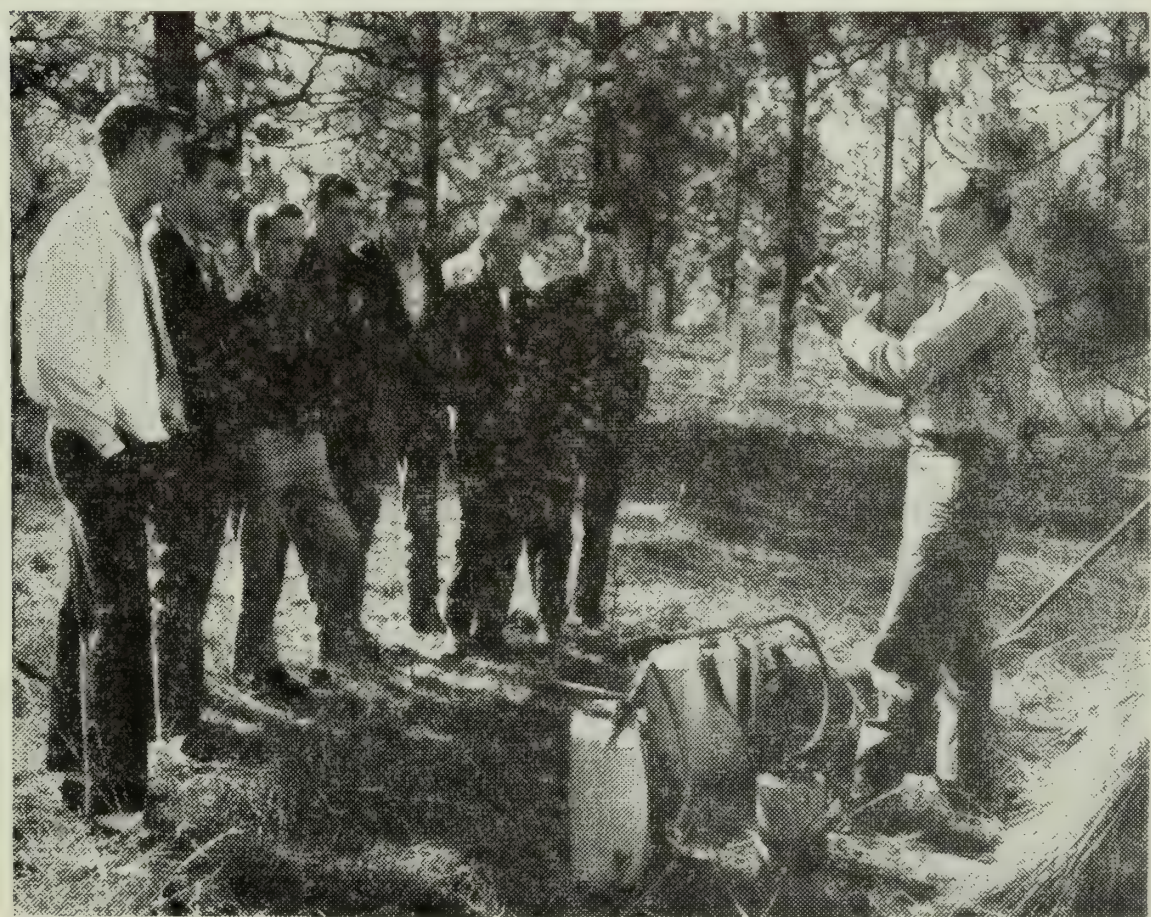
In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year, 43,045 people saw motion pictures on forestry at 529 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

In 1930 forestry was added as a course of study in vocational agriculture classes in South Carolina. Each year the Agricultural Education staff of the State Department of Education and the State Commission of Forestry work together in emphasizing the importance of forest conservation to vocational agriculture students.

School forest laboratories serve as aids in teaching forestry. They are "outdoor classrooms" where young men learn to do



Forestry Commission personnel cooperate with the Department of Education to give Vocational Agriculture students training in techniques of better forest management and fire protection.

by doing. The students construct firebreaks to protect their laboratory from fire. They treat one small plot each year as they learn to plant trees, eliminate weed trees, select, measure, and estimate merchantable volumes in trees which are to be removed. Bids are taken and the timber in need of cutting is sold under contract as the students learn to market forest products. The laboratory is divided into a number of small plots to be worked one a year. One plot is left untreated for comparison with those where good forestry practices are carried out.

Many schools have forest laboratories, some are in the process of establishing laboratories, and still others have need for them.

During the year one-day forestry workshops were held throughout the state for all teachers of vocational agriculture. The purpose of these workshops was to promote a school forest laboratory at all schools with a vocational agriculture department, and encourage closer cooperation in forestry work.

The Forestry Commission sponsors an annual FFA and NFA Chapter Forestry Contest in cooperation with the Agricultural Education staff of the State Department of Education. For the school year 1962-63 first and second place awards were presented to the winning FFA and NFA Chapters in each Vocational Agriculture District as follows:

Future Farmers of America

DISTRICT I

- (1) Wren FFA Chapter
- (2) Pendleton FFA Chapter

DISTRICT II

- (1) Rock Hill FFA Chapter
- (2) Winnsboro FFA Chapter

DISTRICT III

- (1) Blaney FFA Chapter
- (2) No second place winner

DISTRICT IV

- (1) Bells FFA Chapter
- (2) Blackville FFA Chapter

DISTRICT V

- (1) Hannah FFA Chapter
- (2) Bennettsville FFA Chapter

DISTRICT VI

- (1) St. Stephen FFA Chapter
- (2) Socastee FFA Chapter

*New Farmers of America***DISTRICT I**

- (1) Geer-Gantt NFA Chapter
- (2) No second place winner

DISTRICT II

- (1) M. M. Bethune NFA Chapter
- (2) No second place winner

DISTRICT III

- (1) Riverside NFA Chapter
- (2) No second place winner

DISTRICT IV

- (1) Ruffin NFA Chapter
- (2) No second place winner

DISTRICT V

- (1) Rosenwald NFA Chapter
- (2) Mayo NFA Chapter

DISTRICT VI

- (1) Tomlinson NFA Chapter
- (2) No second place winner

RESOURCE-USE EDUCATION

Forestry and state park personnel worked with many schools and classes during the year in carrying out projects and instruction in the field of conservation. Particular emphasis was again placed on state park trails as effective "outdoor classrooms."

The resource-use education movement has stimulated interest in the out-of-doors as an aid to effective teaching, and provides an excellent opportunity for teaching conservation concepts.

The S. C. State Commission of Forestry continued its cooperation with the South Carolina Advisory Council on Conservation Education, composed of representatives of conservation agencies and groups, State Department of Education, teachers and others.

During the year this group planned a series of programs to be recorded on video tape for the South Carolina History series which is telecast by the S. C. Educational Television Center. One program on the general theme of how conservation, or lack of it, has affected the history of South Carolina was recorded. Two additional programs were planned for recording early in the 1963-64 fiscal year. These are on the themes of "Soil & Water" and "Forests and Wildlife" and how their use or misuse has affected the history of the state. The Commission of Forestry assisted with the outline for the first program and plans to assist in taping the program on "Forests and Wildlife," along with the Wildlife Resources Commission.

Teachers' guides on conservation for a number of grade levels on a number of different subjects are also being planned.

TALKS

Personnel of the State Commission of Forestry give talks about forestry and state parks before many groups. The use of color slides with many of the talks helps make them much more interesting and more effective.

During the year a total of 413 talks were made by Commission personnel to 16,338 people. Garden clubs, church groups, school groups, civic and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. As one example of the number of people reached, during the past year 21,484 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting, and preventing fires was usually explained or demonstrated.

EXHIBITS

The Forestry Commission welcomes the opportunity to place exhibits in fairs and other places where educational forestry and state park displays are requested. Exhibits provide an excellent

means of placing forestry and state park information before the people.

More than a million people saw forestry and state park exhibits and displays in fairs, parades, and special meetings reported in the following tabulation:

Exhibits at State and County Fairs

Location of Exhibit—		Est.
County Fair	Type of Exhibit	Attend.
Abbeville	Insect Display	6,700
Chester	Insect Display	7,500
Greenwood	Insect Display	42,000
Greenville	Insect Display	50,000
Anderson	Insect Display	75,000
Anderson (N)	Insect Display	50,000
Kershaw	Insect Display	10,000
York	Insect Display	10,000
Pickens	Insect Display	25,000
Florence	Smokey's Commandments, & Insect Display	175,000
Spartanburg	A Forest is More Than Trees, & Insect Display	50,000
Newberry-Saluda	Insect Display	20,000
Chesterfield	Insect Display	6,000
Orangeburg	Insect Display	15,000
Berkeley	Insect Display	4,000
Chester (N)	Insect Display	3,000
Sumter	Insect Display	20,000
Dillon	Insect Display	6,000
Marion	Insect Display	7,500
Union	Insect Display	35,000
Lee	Insect Display	6,000
Laurens	Insect Display	27,500
Lancaster	Insect Display	10,000
McCormick	Insect Display	3,200
Beaufort	Insect Display	25,000
Loris	Insect Display	7,500
Darlington	Insect Display	5,000
Marlboro	Insect Display	8,000
TOTAL		709,900
State Fairs		
Columbia	Beetles in Your Pines? and Hunting Island State Park Display	155,000
Columbia (N)	Beetles in Your Pines? and Hunting Island State Park Display	90,000
TOTAL		245,000

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

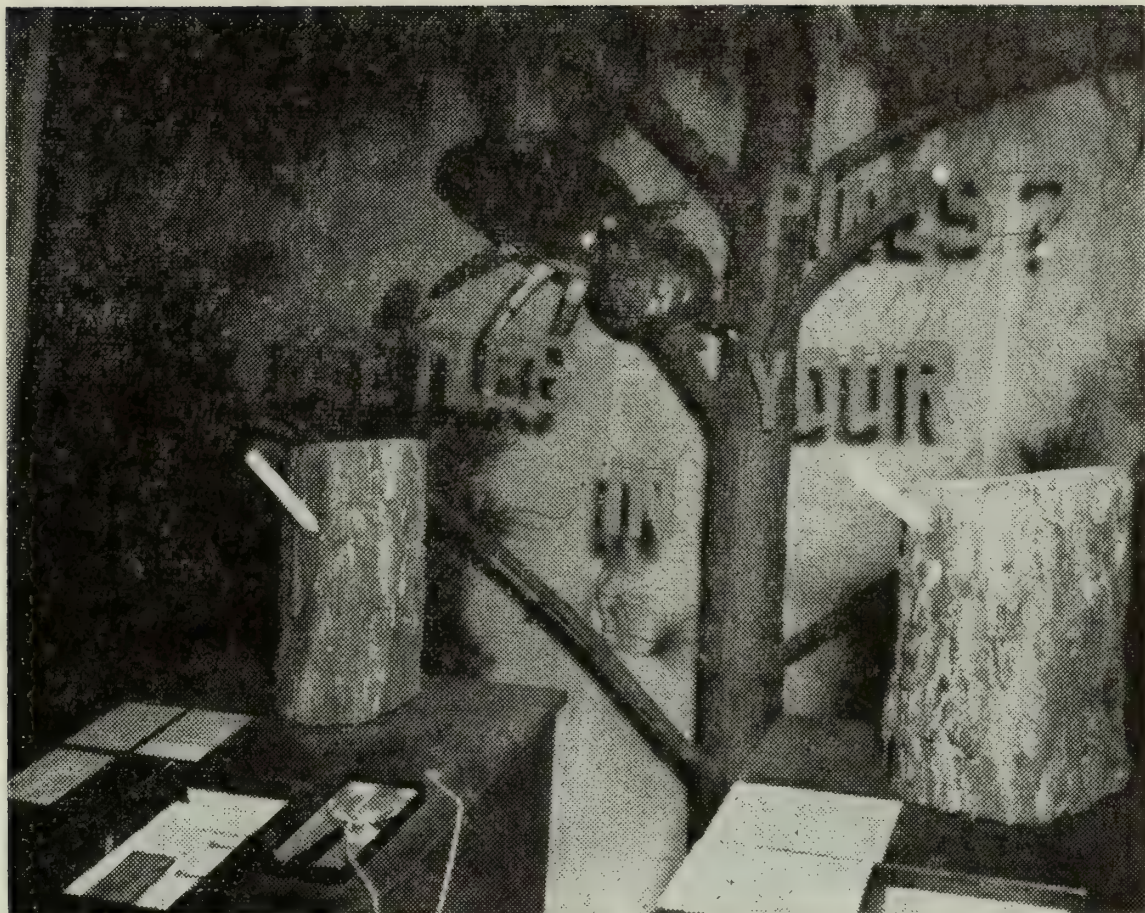
Lexington (Peach Festival) Smokey Bear on Float	3,000
Lexington (Fire Prevention Parade) Smokey Bear on Float	2,500
Florence (Fire Prevention Parade) Smokey Bear on Float	15,000
Lake City (Fire Prevention Parade) Smokey Bear on Float	2,000
Columbia (Fire Prevention Parade) Smokey Bear with Ranger's Truck	40,000
Shaw Air Force Base (Fire Prevention Parade) Smokey Bear on Ranger's Truck....	10,000
Columbia (Belvedere Cub Scout Pack)—Smokey Bear Costume	50
Charlotte, N. C. (Swift & Company meeting for employees) Smokey Bear Costume..	50
Walterboro (Christmas Parade) Smokey Bear on Float	2,500
Cheraw (Christmas Parade) Smokey Bear on Float	12,000
Pond Branch (Boiling Springs Community Christmas Parade) Smokey Bear on Float	500
Dillon (Christmas Parade) Smokey Bear on Float	5,000
Latta (Christmas Parade) Smokey Bear on Float	3,000
Barnwell (Christmas Parade) Smokey Bear on Float	5,000
Allendale (Christmas Parade) Smokey Bear on Float	3,000
Lexington (Christmas Parade) Smokey Bear on Float	2,500
Holly Hill (Christmas Parade) Smokey Bear on Float	5,000
Blackville (Christmas Parade) Smokey Bear on Float	3,500
Edgefield (Christmas Parade) Smokey Bear on Float	6,000
Pelion (Christmas Parade) Smokey Bear on Float	500
Columbia (Chi Omega Sorority, U.S.C.) Smokey Bear Costume	500
Estill (Watermelon Festival Parade) Smokey Bear on Float	5,000
Nichols (Christmas Parade) Smokey Bear on Float	12,500
Loris (Christmas Parade) Smokey Bear on Float	5,000
Aynor (Christmas Parade) Smokey Bear on Float	5,000
Bowman (Christmas Parade) Smokey Bear on Float	2,500
Williston (Christmas Parade) Smokey Bear on Float	2,500
Barnwell (Cub Scout Circus) Smokey Bear Costume	400
Kingstree (Fire Prevention Parade) Smokey Bear on Float	500
Newberry (Civil Defense Parade) Smokey Bear on Float	8,500
Pageland (Watermelon Festival) Wood panel	25,000
Georgetown (County Exposition) Exhibit	3,000
Clemson (Farm and Home Week) Forest Management	20,000
St. Matthews (Co-op Fair) Wood panel exhibit	3,000
Barnwell (Co-op Fair) Exhibit	1,000
Conway (Horry Co. Electric Fair) Wood panel exhibit	3,000
Aiken (Aiken Garden Club—Flower Show) Exhibit	3,000
Columbia (Rosewood School) Common Woods Exhibit	500
Charlotte, N. C. (Carolina Lumber & Bldg. Supply Assn.) Exhibit	2,000
Columbia (Science Fair Symposium for Teachers) Common Woods of S. C.	200
Georgetown (Outland Community) Insect Display & A Forest is More Than Trees...	3,000
Rock Hill (Children's Nature Museum) A Forest is More Than Trees	2,030
Hemingway (Flower Show) Exhibit	250
Pleasant Hill (Community Fair) Management	3,000
Total	229,780
GRAND TOTAL	1,184,680

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperate generously with the Forestry Commission by providing air time for many programs on forest fire prevention and other phases of forestry, and on the educational and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that a total of 435 radio and TV programs on state parks and forestry



Information on identification and control of bark beetles was featured at State Fair as part of the Commission's effort to cope with the serious epidemic of southern pine beetles affecting the piedmont counties of South Carolina.

were presented during the year. This number does not include the many hundreds of recorded programs and film spots carried by radio and television stations, as made available through the National and Southern Cooperative Forest Fire Prevention Campaigns, and spot announcement material prepared by the Commission of Forestry for special use during periods of high fire danger.

TRAINING

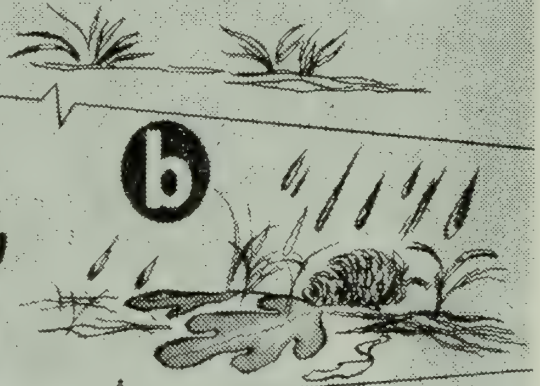
The Commission continually strives to improve its educational techniques and methods. In accord with this, a series of district training meetings was conducted where every ranger and warden in the state was given instruction and practice in the presentation of a program for fifth grade school children throughout the state. The schoolyard demonstration for the fifth grade was reemphasized; however, the introduction of a new flip chart makes it possible to conduct a program indoors should the weather be too bad for an outdoor presentation. In addition to

WHEN WE PREVENT FOREST FIRES, WE....



**PROTECT HOMES
OF WILDLIFE**

**PROTECT THE SOIL
AND WATER-HOLDING
MULCH AND LITTER**



**PROTECT TREES FROM
DAMAGE AND LATER
DISEASE AND INSECT
ATTACKS**

**PROTECT FUTURE FORESTS
BY GIVING LITTLE TREES
A CHANCE TO GROW**



Each county was provided with an attractive 27" x 36" flip chart to help with the regular fifth grade schoolyard demonstrations promoted each year.

this, individual and on-the-job training was given throughout the year to help make more effective and interesting every news release, every program, talk, and slide lecture used to promote better conservation practices throughout the state.

NEWS RELEASES AND ARTICLES

Newspapers provide opportunities to present the conservation education program of the Commission and excellent press coverage helped place forestry and state parks news before the people regularly.

During the year Commission personnel prepared 744 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, such as during serious fire situations, news items are given orally to individual papers and to the wire services.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or prepared mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

BOYS' FORESTRY CAMPS

The sixteenth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park, during the year. Ninety-seven young men representing every county in the state attended the week-long camp. One boy from each county was selected by each county ranger from postal cards written by boys interested in attending the camp.

On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

This year for the first time a group of Explorer Scouts also attended camp, acting as junior counselors. Their assistance to the forestry staff was invaluable and their conduct excellent.

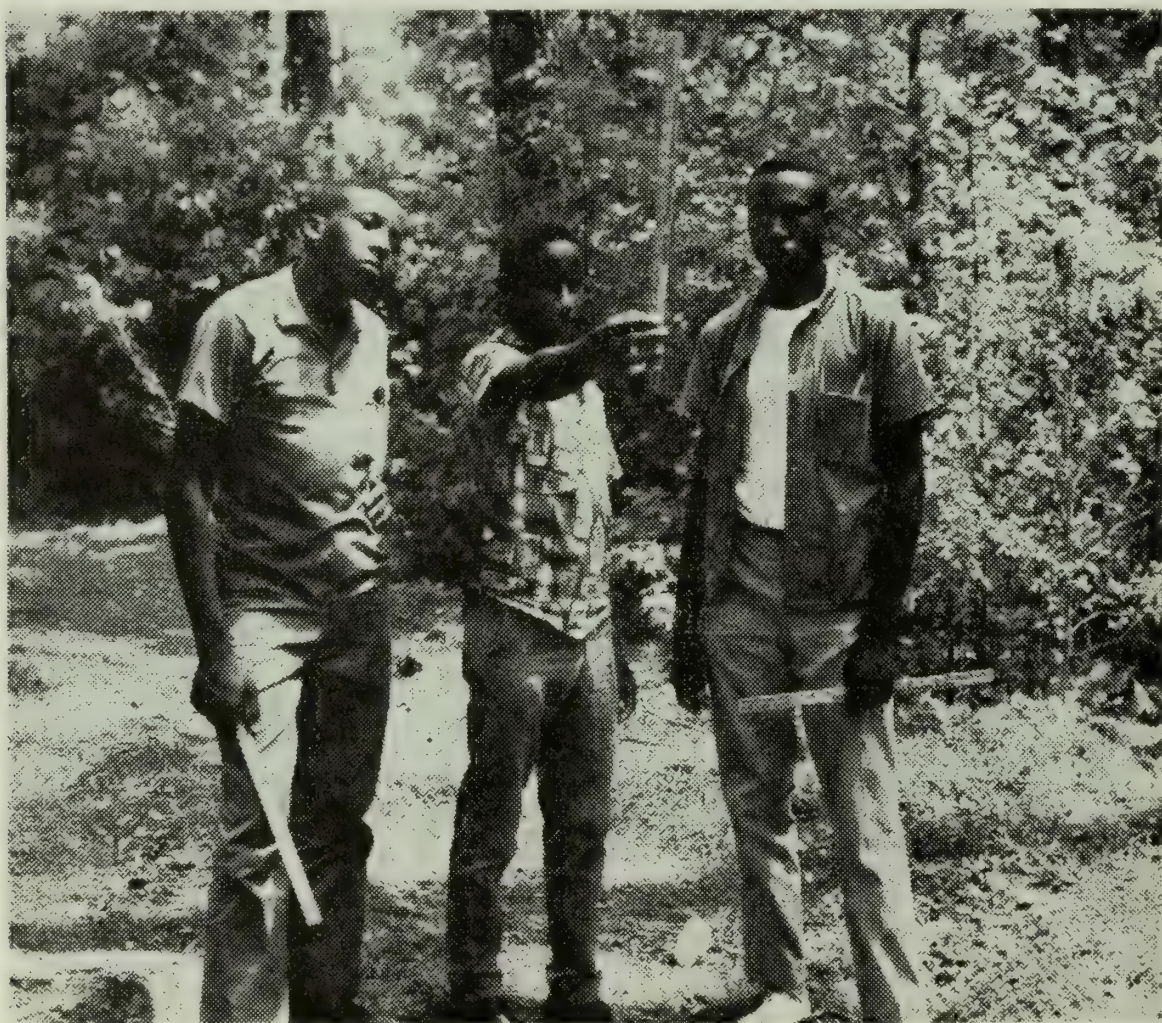
The first Negro Boys' Forestry Camp was held this year at Mill Creek Group Camp where 48 negro boys from all over the state attended the week-long camp. The group was made up of

24 NFA boys selected by the Vocational Agriculture staff and 24 Negro 4-H boys selected by the Extension Service. In addition to the Commission's supervision staff, additional counselors were selected from among the Negro Vocational Agriculture teachers and assistant and associate county agents of the state.

An interesting program of study and recreation characterized this method of teaching conservation to the youth of South Carolina. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm, as well as recreational opportunities offered by state parks.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide



Forty-eight Negro boys attended the Commission's first Forestry Camp for Negroes at Mill Creek Group Camp. How to measure the volume of a standing tree was one of the many phases of forest conservation covered during the week.

detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., the Cooperative Forest Fire Prevention Campaign, various forest industry companies and associations, and other organizations, groups, and agencies which publish material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park installations of the Commission of Forestry. The Commission's exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

Ground was broken this year on Harbison State Forest in preparation for moving the sign shop operation from Sumter to Columbia, along with all other central shop and warehouse facilities.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owner and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects,

disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, which is the state representative of American Forest Products Industries, Inc., the national sponsor. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program.

As of June 30, 1963, there were 570 Tree Farms in the state, comprising 2,045,877 acres.

ADMINISTRATION

SUMMARY

No state-appropriated funds were provided for salary or wage adjustments and as a result losses of both technical and other personnel continued at an excessive rate. A total of 79 employees resigned during the year of which 57% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and Park program \$3,411,471.59. Of this total the Division of Forestry expended \$2,913,136.63 and the Division of State Parks \$498,334.96 (see Appendix for detailed explanation of funds available and expenditures made). State-appropriated funds amounted to \$1,935,473.64 for the Division of Forestry and \$428,507.00 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 87 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 12 accidents. Of the 12 accidents which occurred, 8 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and assistance of the National Safety Council.

The Commission instituted a safe driving program sponsored by the National Safety Council several years ago. Under this program a driver must operate a vehicle on official business for twelve consecutive months without a preventable accident before he is entitled to the first year safe driving award. If a preventable accident occurs during the first three years or before the

third year award has been received, the driver's safe driving record is cancelled and he is required to begin again. Should a preventable accident occur after the third year award is received, the driver is penalized and is requested to operate for twelve additional months from the date of accident before entitled to the next year award.

A review of the Commission's employees' safe driving records indicates that 128 of the 386 drivers have operated Commission or privately owned vehicles on official business for a period of one to five years without an accident; 86 for six to ten years; 65 for eleven to fifteen years; 99 for sixteen years and over.

PERSONNEL

A large number of Commission employees continued to resign to accept better salaries. Such resignations handicapped the efficient operation of all Commission activities. Fifteen per cent of the total personnel resigned during the year; resignations were greatest among county unit personnel. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

PERSONNEL LOSSES
DIVISION OF FORESTRY
Resignations—1962-63

Foresters	3	
Timber Marker	1	
		<hr/>
Technical		4
Supply Clerk	1	
Clerk-Stenographer	13	
Rangers	3	
Wardens	13	
Towermen	14	
Heavy Suppression Unit Operator	1	
Tractor Operators	13	
Mechanic	1	
		<hr/>
Non-Technical		59
		<hr/>
Total Resignations		63

Losses Due to Promotions or Change in Positions

Foresters	3	
Assistant Nurseryman	1	
Wardens	2	
Tractor Operators	4	
		<hr/>
Total		10
Total Losses, Division of Forestry		73

DIVISION OF STATE PARKS

Resignations—1962-63

Rangers	7	
Foreman	1	
Boat Manager	1	
Caretaker	2	
Assistant Maintenance Mechanic	1	
Laborers	4	
	<hr/>	
Total		16

Losses Due to Promotions or Change in Positions

Rangers	1	
Foreman	1	
	<hr/>	
Total		2
		<hr/>
Total Losses, Division of State Parks		18
		<hr/>
Grand Total, Personnel Losses		91

STATE PARKS

"Conservation recognizes fully the right of the present generation to use what it needs and all it needs of the natural resources now available, but it recognizes equally our obligation so to use what we need that our descendants shall not be deprived of what they need."

Gifford Pinchot

SUMMARY

Practicing the conservation and preservation of the natural resources of the state parks, playing host to the day and overnight use of these areas by three-and-a-third million visitors, and living through another twelve months of the desegregation court suit, sums up in a general way the activities within the state parks for the fiscal year 1962-1963.

A House Study Committee was appointed "to study the present and future needs of the State Parks" and to report to the 1964 General Assembly.

Appropriations continued sufficient for operations; however, there were no expenditures for capital expansion or improvements.

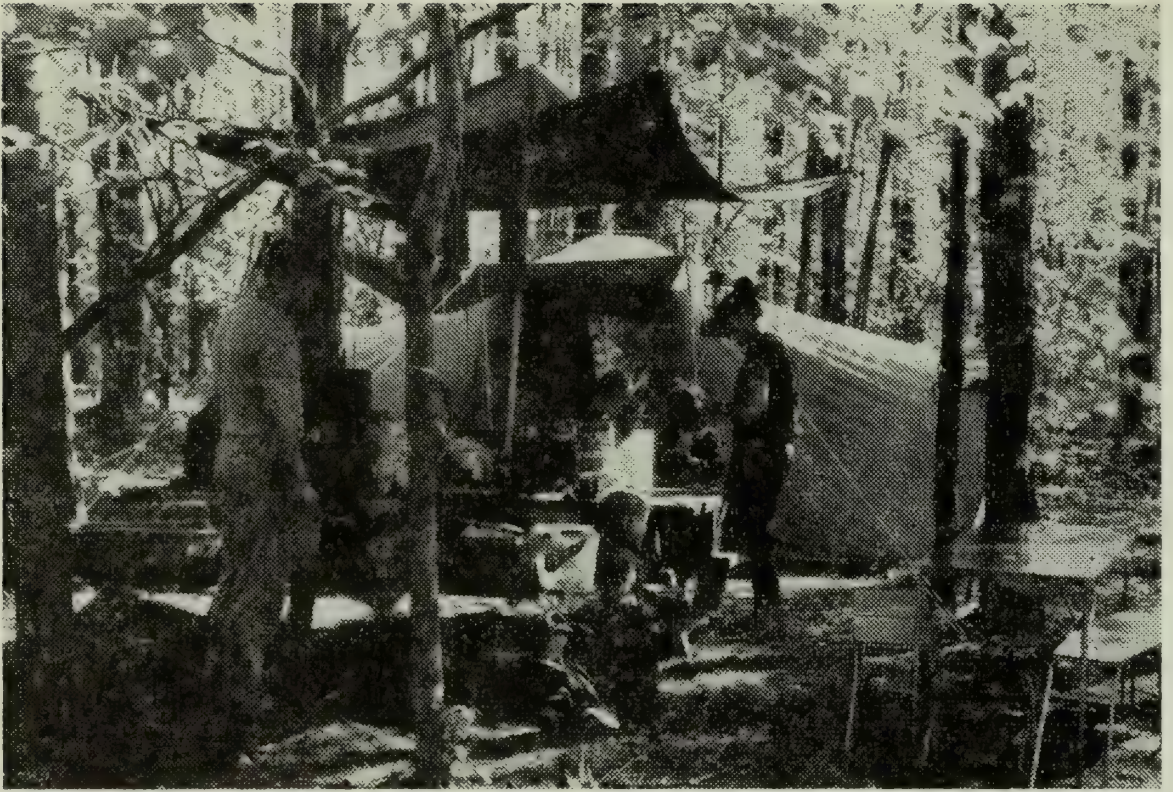
Other than in the lower brackets of employment, there was no turnover in park personnel.

ATTENDANCE

State Park attendance topped the three-million mark for the seventh consecutive year. The attendance of 3,306,501 was 120,085 greater than the previous year, and was the third highest attendance reported in the 27-year history of South Carolina's state parks.

Myrtle Beach Park recorded 650,565 visitors during the year. Other state parks reporting attendance of more than 100,000 were:

Paris Mountain	353,551
Sesquicentennial	302,466
Kings Mountain	252,257
Hunting Island	246,386
Cheraw	227,330
Table Rock	207,743
Greenwood	192,430
Poinsett	124,081



Family camping at South Carolina state parks has shown an increase of more than 400 percent in the past six years.

Although most state park use was by South Carolinians, one of every five, or 164,543 of the 753,211 cars at the parks had out-of-state license plates. Visitors came from all parts of the United States and Canada.

Picnicking was the most popular single activity, enjoyed by 1,095,484 people. Nearly half a million swimmers used the state park lakes, streams and pools, and more than 102,000 fishermen used state park waters during the year.

Family camping at the state parks set a new record during the year as 187,355 persons enjoyed this fast-growing activity which has shown more than a 400-percent increase in the past 6 years.

The 23 state parks for whites recorded an attendance of 3,162,263, while attendance at the 6 Negro areas was 144,238 during the year.

COURT ACTION

As the fiscal year closed, a decision was expected momentarily in the suit filed in July 1961 to desegregate Myrtle Beach and Sesquicentennial and all other state parks.

This action is the second chapter in the segregation story. In February 1956, Edisto Beach State Park was closed by the state

legislature a few hours ahead of an expected court decision. No ruling was made in the Edisto case, as the park was already closed and all use prohibited.

The 1956 General Assembly enacted new legislation defining the operation of state parks on a "racially separate" basis.

HOUSE STUDY COMMITTEE ON NEEDS OF STATE PARKS

A House Resolution by the Ways and Means Committee on May 8, 1963, established a Committee to "study the present and future needs of the State Parks . . ." The Committee would report its findings at the beginning of the 1964 General Assembly. Various meetings were being arranged by the Committee for the purpose of visiting the state parks and interviewing park users and citizens regarding the parks' operations.

APPROPRIATIONS

The operating budget for the fiscal year, amounting to \$410,746, was some \$15,000 greater than the preceding year.

There was no appropriation for capital improvements; however, some previously designated funds are available for developments at Huntington Beach and Croft State Parks.

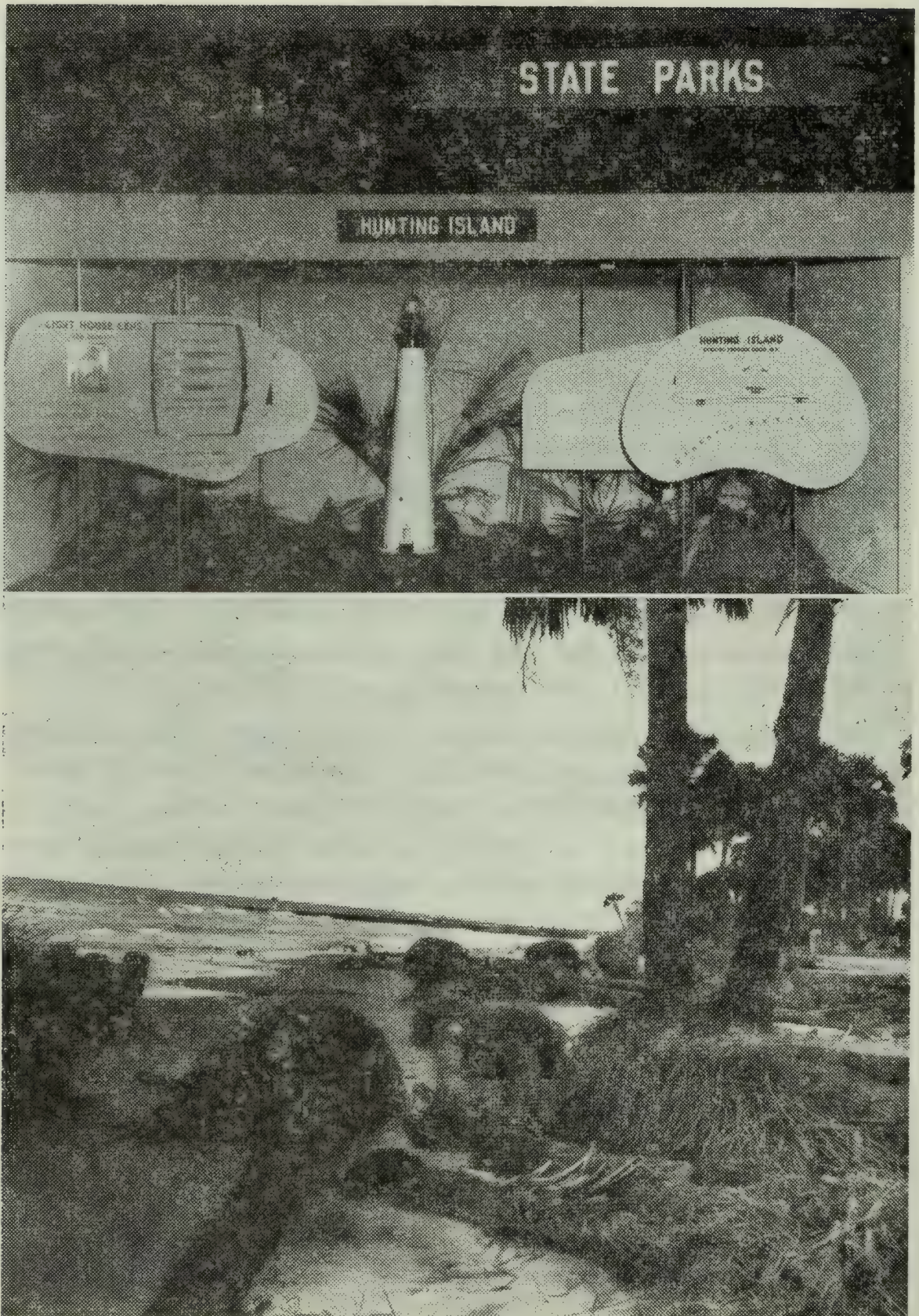
With an attendance in South Carolina 3,306,501 park users and an annual operational expense of \$410,746, there is a resulting cost of less than 12½¢ per park visitor, against a national average of about 20 cents.

FAMILY VACATION CABINS

Since the inauguration of a system of state parks, back in 1934, the family cabins have been popular with vacationing South Carolinians.

Nine of the state parks have the family cabins—Cheraw, Givhans Ferry, Hunting Island, Myrtle Beach, Oconee, Poinsett, Santee, and Table Rock for white citizens and Hunting Island and Pleasant Ridge for Negro families.

All cabins have electric lights, electric stoves, electric refrigerators, bathrooms with running water, and are equipped with beds, mattresses, pillows, furniture, cooking utensils and china. The cabin user must bring blankets, bed linen and towels, and silverware, such as knives, forks and spoons.



The State Parks exhibit above, at the 1962 State Fair, highlighted the unique historical attractions and the problem of beach erosion at Hunting Island State Park.

Approximately one thousand families go to the parks during the vacation period and there is casual use throughout the year. The demand is so popular that drawings are held each year soon after March 1st to determine the reservations and to give everyone the same chance to obtain a cabin. Applications to be included in the drawing must be addressed to the S. C. State Commission of Forestry, P. O. Box 357, Columbia, and must be post-marked no later than March 1st.

During the period June 1 through Labor Day summer rates are in effect and cabins are rented for a period of one week only. After Labor Day and through May cabins are available at reduced rates and for weekend use. Many cabins are winterized and are comfortable throughout the year.

GROUP CAMPS

Seven organized camps, six for white groups and one for Negroes, are located at four state parks. These facilities are used by agency groups such as churches, girl scouts, schools, welfare and health agencies, and by private organizations.

Camp Forest and Camp Juniper are located at Cheraw State Park;

Camp York and Camp Cherokee are at Kings Mountain State Park;

Burnt Gin and Mill Creek Group Camps at Poinsett State Park;

Camp Buckhorn is located at Paris Mountain State Park.

All camps have sleeping quarters, complete mess halls and kitchens, recreation buildings, infirmaries, toilet and shower buildings, and play fields.

The rental charge is 45 cents per person per day, with certain minimums in effect. Out of season use is limited to fall and spring as facilities are not adapted to mid-winter use.

FAMILY CAMPING

The nationwide interest in family camping is also reflected in the South Carolina state parks. The attendance this year totaled 187,355 campers.

As more and more families are seeking adventure in the out of doors, more and more spaces have to be added to take care of South Carolinians and out-of-state visitors.

Sixteen state parks and one wayside park have designated areas for family camping with developed facilities such as water and electric connections, tables, latrines and garbage collection. The rental is \$1.50 per night per family unit. In other parks, space is found for the casual overnight camper at a charge of \$1.00.

The distribution of these facilities is shown in the following table:

FAMILY CAMPING AREAS AND FACILITIES

PARK—Location	FACILITIES							
	No. of Units	Flush Toilet	Showers	Electrical Connections	Water Connections	Tables	Miles to Gas and Grocery	Other Facilities
AIKEN—18 miles E. Aiken	4	*	*	x	x	x	3	1 2 3 4
BARNWELL—3 miles S. Blackville	8	x	*	x	x	x	2	1 2 3 4
CHERAW—4 miles S. Cheraw	18	x	x	x	x	x	2	1 2 3 4
CHESTER—3 miles SW. Chester	6	x		x	x	x	2	2 3 4
COLLETON WAYSIDE—12 miles N. Walterboro	4	x		x	x	x	1	2 4
GIVHANS FERRY—15 miles W. Summerville ...	10	*	*	x	x	x	1	1 2 3 4
HUNTING ISLAND—16 miles E. Beaufort	36	x	*	x	x	x	4	1 2 4
GREENWOOD—17 miles E. Greenwood	30	*	*	x	x	x	3	1 2 3 4
KINGS MOUNTAIN—12 miles N. York	20	x	x	x	x	x	1	1 2 3 4
LITTLE PEE DEE—12 miles S. Dillon	10	x	*	x	x	x	6	1 2 3 4
MYRTLE BEACH—3 miles S. Myrtle Beach	150	x	x	x	x	x	2	1 2 4
OCONEE—8 miles NW. Walhalla	20	x	*	x	x	x	2	1 2 3 4
POINSETT—18 miles SW. Sumter	10	x	x	x	x	x	9	1 2 3 4
RIVERS BRIDGE—6 miles W. Ehrhardt	10	x	*	x	x	x	5	1 2 3 4
SANTEE—5 miles W. Santee.....	15	x	*	x	x	x	4	1 2 3 4
SESQUICENTENNIAL—13 miles N.E. Columbia	25	*	*	x	x	x	3	1 2 3 4
TABLE ROCK—16 miles N. Pickens	26	x	*	x	x	x	4	1 2 3 4

SYMBOLS: x—"Yes"

*—Available at Bathhouse

1—Swimming

2—Fishing

3—Boating

4—Hiking and Trails

A "Unit" is a space designed to accommodate from two to six people.

Areas "Open" from 8 a.m. to 10 p.m., except from 8 a.m. to 8 p.m. in Dec., Jan. and Feb.

Pets must be kept on leash.

No advance reservations.

CHARGES: Camping charges at above parks \$1.50 per night; check-out time 10 a.m. Limited camping facilities are available at 8 other areas at a cost of \$1.00 per night.

ACQUISITIONS AND DEVELOPMENTS

The first state park area was acquired in early 1934. Now twenty-three state parks, six historical sites and one wayside park stretch from the mountains to the sea.

From the beginning, areas were planned and developed for both white visitors and for Negro park users.

The table following gives names, acreages, location, date of establishment of acquisition and date opened to visitors of the several state parks, and the state historical sites.

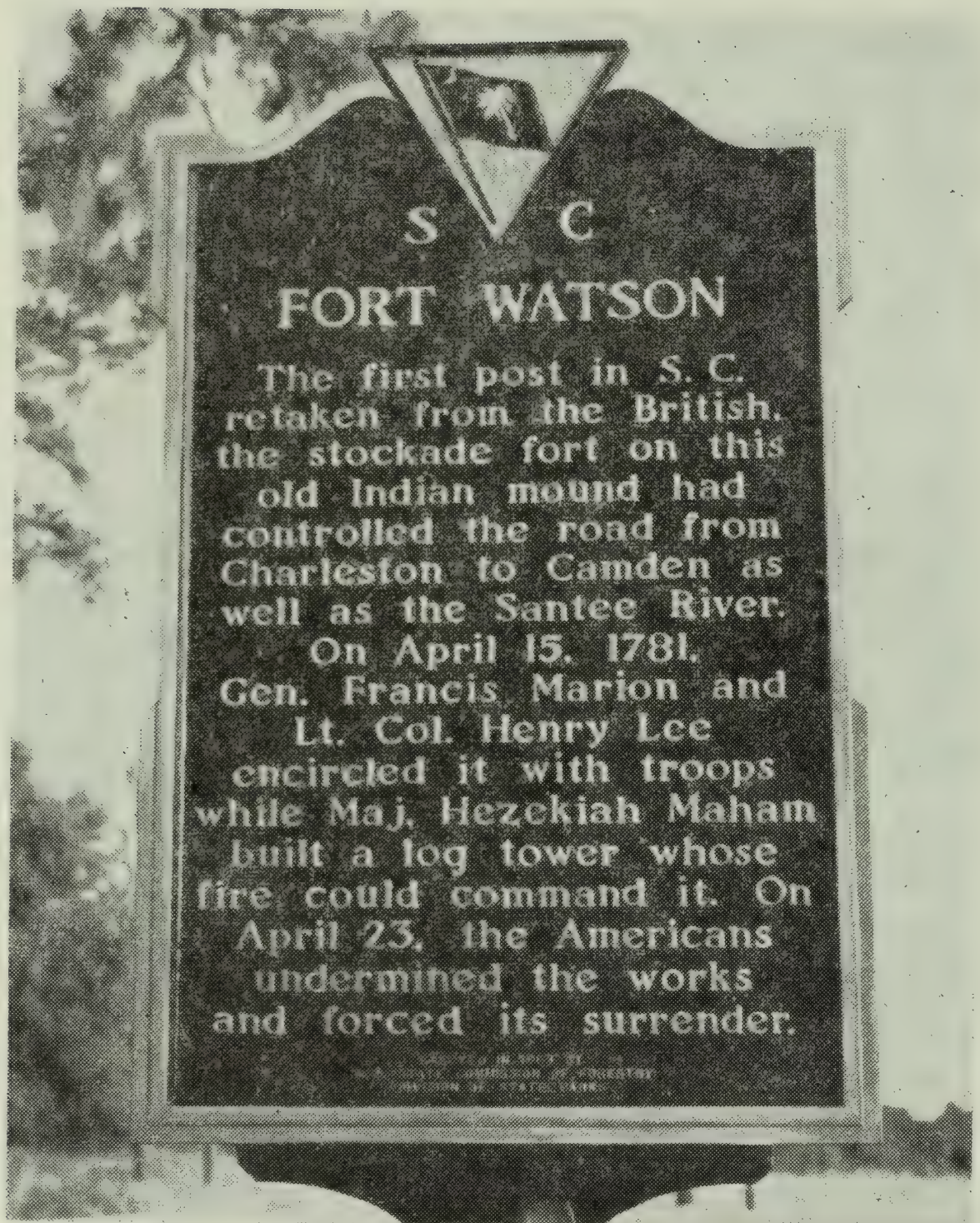
STATE PARKS

Park Name	Acreage	Location (County)	Date Estab. or Acquired	Date Opened to Visitors
Aiken	1,067	Aiken	July 1934	Aug. 1936
Andrew Jackson	360	Lancaster	Apr. 1953	Mar. 1957
Barnwell	307	Barnwell	July 1937	Aug. 1939
Cheraw	7,361	Chesterfield	Mar. 1934	July 1939
Chester	523	Chester	May 1935	July 1939
Colleton Wayside	35	Colleton	May 1938	June 1940
Croft	7,088	Spartanburg (Under Construction)	May 1949	
Edisto	1,255	Charleston (Closed Feb. 1956)	Feb. 1935	June 1937
Givhans Ferry	1,235	Dorchester-Colleton	Oct. 1934	June 1937
Greenwood	914	Greenwood	Apr. 1938	July 1940
Hunting Island	5,000	Beaufort	July 1938	June 1941
Huntington Beach	2,500	Georgetown (Negro Area Only)	May 1960	June 1962
Kings Mountain	6,141	York-Cherokee	Nov. 1934	June 1940
Lee	2,839	Lee	June 1935	June 1941
Little Pee Dee	835	Dillon	June 1951	June 1955
Myrtle Beach	312	Horry	Aug. 1934	July 1936
Oconee	1,165	Oconee	July 1935	June 1937
Paris Mountain	1,275	Greenville	Apr. 1935	June 1937
Pleasant Ridge	300	Greenville	Sep. 1950	June 1955
Poinsett	1,000	Sumter	Aug. 1934	Aug. 1936
Rivers Bridge	390	Bamberg	May 1945	July 1945
Santee	2,436	Orangeburg	Jan. 1942	June 1949
Sesquicentennial	1,445	Richland	Aug. 1937	June 1940
Table Rock	2,860	Pickens	May 1935	June 1940
48,653				

STATE HISTORICAL SITES

Name	Acreage	Location (County)	Date Estab. or Acquired
Eutaw Springs Battleground Site	2.70	Orangeburg	April 1963
Ft. Watson Battle Site & Indian Mound	2.80	Clarendon	May 1, 1948
General Francis Marion Burial Site	9.65	Berkeley	March 7, 1962
Old Dorchester Town Site	20.56	Dorchester	February 11, 1960
"Rose Hill," Governor Gist Mansion	41	Union	July 8, 1960
General Thomas Sumter Burial Site	5	Sumter	August 18, 1941
Col. Isaac Hayne Burial Site	1	Colleton	May 1962

82.71



Cast aluminum markers, official in design and lettering, were provided at historical sites.

STATE HISTORICAL SITES

A "State Historical Site" is an area of historical significance that has been acquired by the state and turned over to the Division of State Parks by the Legislature for administration and maintenance. One new Historical Area was acquired during the year, when in May of 1963 a deed was issued to the Commission of Forestry for one acre of land in Colleton County which includes the grave of Col. Isaac Hayne in the family burial plot.

Appropriations under Item 3 of the General Appropriations Bill are made for the administration of these Historical Areas separate from Item 2—the State Parks appropriation.

For the year 1962-63 an appropriation of \$17,761 was made available for maintenance and operation of these areas. In addition to this there was a carry over of \$4,828.50 from the Fort Dorchester "Special Fund" of the 1961-62 year.

Full time resident custodians are employed at Old Dorchester and at Rose Hill, while at Fort Watson, Eutaw Springs and the burial sites of Francis Marion, Isaac Hayne and Thomas Sumter part-time caretakers, residing in the vicinity, maintain the areas.

There was a general upgrading of all sites during the fiscal year. Bushes and undergrowth were cut back to release certain features of the areas, fallen trees were removed, plantings made, fences and gates mended and established, and markers and signs erected.

Five cast aluminum markers, official in design and lettering, were provided at the following sites: Three at Old Dorchester—one each at the Old Fort, at St. George Parish Church and within the lots of the old colonial town; one at Fort Watson and one at Rose Hill. The wording for these markers were authenticated by the South Carolina Archives Department.

SUMMARY OF STATE PARK FACILITIES

NAME OF STATE PARK and STATE HISTORIC SITE with Post Office Address	Picnic Areas	Barbecue Pits*	Swimming	Bath House	Boating	Fishing	Family Cabins	Fishing Cabins	Group Camps †	Family Camping‡	Fishing Pier	Recreation Bldg.	Tea Room-Grill	Refreshment Stand	Amphitheatre	Nature Trails	Museum
AIKEN Windsor, S. C., RFD.....	x	x	x	x	x	x		x		x				x		x	
ANDREW JACKSON HISTORICAL Lancaster, S. C., RFD.....	x																x
BARNWELL Blackville, S. C.	x	x	x	x	x	x				x		x		x		x	
CHERAW Cheraw, S. C. { White Area. Negro Area.	x x	x	x x	x x	x x	x x	x		x x	x x		x		x x	x x	x	
CHESTER Chester, S. C.	x	x			x	x				x		x				x	
COLLETON WAYSIDE PARK Canadys, S. C.	x				x	x				x							
CROFT Spartanburg, S. C., RFD.....	(Under Construction)																
EDISTO BEACH Edisto Island, S. C. (CLOSED).....																	
GIVHANS FERRY Ridgeville, S. C., RFD.....	x	x	x	x	x	x	x			x		x		x		x	
GREENWOOD Ninety Six, S. C., RFD. { White Area. Negro Area.	x x	x	x x	x x	x x	x x				x x				x		x	
HUNTING ISLAND Frogmore, S. C. { White Area. Negro Area.	x x		x x	x x		x x	x x			x			x	x x		x	
HUNTINGTON BEACH { White Area.... Pawleys Island, S. C. { Negro Area....	x		x	x		x				x							
KINGS MOUNTAIN Kings Creek, S. C., RFD.....	x		x	x	x	x			x	x				x		x	
LEE Bishopville, S. C., RFD.....	x	x	x	x	x	x		x				x		x		x	
LITTLE PEE DEE Dillon, S. C.	x	x	x	x	x	x				x							
MYRTLE BEACH Myrtle Beach, S. C.	x		x	x		x	x			x	x	x		x		x	
OCONEE Walhalla, S. C., RFD.....	x	x	x	x	x	x	x			x		x	x	x		x	
OLD DORCHESTER HISTORICAL Summerville, S. C.....																	
PARIS MOUNTAIN Greenville, S. C., RFD.....	x	x	x	x	x	x			x					x	x	x	
PLEASANT RIDGE (For Negroes) Cleveland, S. C.	x		x	x	x	x	x							x			
POINSETT Wedgefield, S. C. { White Area. Negro Area.	x x	x	x x	x x	x x	x x	x		x x	x			x	x x		x	
RIVERS BRIDGE CONFEDERATE MEMORIAL Ehrhardt, S. C., RFD.....	x		x	x	x	x				x		x		x		x	x
ROSE HILL HISTORICAL Union, S. C.....																	x
SANTEE Elloree, S. C., RFD.....	x		x	x	x	x	x			x				x		x	
SESQUICENTENNIAL Columbia, S. C., RFD.....	x		x	x	x	x				x				x		x	
TABLE ROCK Pickens, S. C., RFD.....	x		x	x	x	x	x			x		x	x	x		x	

* Where no regular barbecue pit is established, temporary arrangements can be made at all Parks.

† Two camps each at Cheraw, Kings Mountain and Poinsett.

‡ Where no developed camping areas are established, temporary arrangements can be made at all parks.

EUTAW SPRINGS, Eutawville, S. C.—Markers and monuments telling of Revolutionary Battle and burial sites.

FORT WATSON, R.F.D., Summerton, S. C.—Old Indian Mound and descriptive markers of Revolutionary Battle.

GEN. FRANCIS MARION, Pineville, S. C., The Swamp Fox of Revolutionary Fame—Family burial ground. Markers and monuments.

OLD DORCHESTER, R.F.D., Summerville, S. C.—Layout of Town Lots (1696-1788); Church Tower (1751); Walls of Old Fort (1757). Markers and displays.

ROSE HILL, R.F.D., Union, S. C.—Ante Bellum Mansion of Secessionist Governor Gist; Period furnishings; Formal gardens, roses, boxwoods; Hardwood forest.

GEN. THOS. SUMTER, R.F.D., Sumter, S. C.—Family burial ground. Markers and monuments. Quaint "Chapel of Ease." Revolutionary hero.

COL. ISAAC HAYNE, Jacksonboro, S. C.—Family burial ground. Markers and monuments. Revolutionary Patriot, executed by British, Aug. 4, 1781.

S. C. STATE COMMISSION OF FORESTRY—DIVISION OF STATE PARKS
SUMMARY OF PARK USE — JULY 1, 1962 - JUNE 30, 1963

NAME OF PARK	Cabin Days Occupied	Cabin Oc- cupants	Group Camps	Tents and Trailers	Fishermen	Picnickers	Swimmers	Out-of- State Cars	Total Cars	Total Visitors
Aiken	129	698	.....	1,082	2,582	53,662	8,233	776	16,040	71,197
Andrew Jackson .....	.....	.....	.....	.....	.....	11,129	.....	2,591	7,067	27,733
Barnwell .....	.....	.....	.....	1,006	1,193	37,906	6,419	332	13,998	63,192
Cheraw	376	2,916	13,250	6,958	14,185	65,500	51,694	10,295	43,867	227,330
Campbell Lake (N) .....	.....	.....	.....	.....	763	9,057	4,114	599	3,062	15,400
Chester .....	.....	.....	.....	123	1,142	11,665	.....	1,056	10,392	40,958
Croft .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edisto .....	.....	.....	.....	3,246	.....	23,271	8,519	.....	.....	.....
Givhans Ferry	271	1,772	.....	12,390	14,803	65,029	6,969	1,224	10,775	41,862
Greenwood .....	.....	.....	.....	.....	1,901	6,192	.....	1,697	38,203	192,430
Greenwood (N) .....	.....	.....	.....	.....	.....	.....	.....	117	3,450	17,004
Hunting Island	606	3,339	.....	12,019	14,689	70,295	80,636	11,196	64,234	246,386
Hunting Island (N)	21	119	.....	.....	1,725	4,870	3,820	240	3,872	15,408
Huntington Beach .....	.....	.....	.....	.....	2,197	2,895	2,165	1,242	9,329	47,119
Huntington Beach (N) .....	.....	.....	.....	.....	3,732	20,628	11,374	911	9,870	52,235
Kings Mountain .....	.....	.....	28,095	5,936	220	70,512	10,691	36,230	53,165	252,257
Lee	70	349	.....	840	2,205	7,800	5,040	250	6,025	25,100
Little Pee Dee .....	.....	.....	.....	3,123	2,519	21,379	8,906	1,571	15,687	47,891
Myrtle Beach	821	4,815	.....	143,905	22,639	63,155	72,526	54,062	162,318	650,564
Oconee	1,508	8,842	.....	6,027	411	20,314	24,626	581	18,459	73,753
Paris Mountain .....	.....	.....	4,262	1,146	.....	109,101	21,550	1,856	63,658	353,551
Pleasant Ridge (N)	28	160	.....	514	371	9,191	1,318	287	4,047	17,782
Poinsett .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mill Creek (N)	159	1,062	4,281	2,537	238	100,059	14,959	3,471	28,103	124,081
Rivers Bridge .....	.....	.....	4,160	.....	211	12,426	9,586	85	3,610	26,409
Santee .....	.....	.....	.....	1,542	523	24,218	11,505	499	10,959	41,987
Sesquicentennial	219	1,311	.....	4,734	10,429	23,825	11,022	2,439	14,127	64,074
.....	.....	.....	.....	7,266	1,668	134,006	52,985	20,749	75,826	302,466

DIVISION OF FORESTRY

Branch of Administration

John R. Tiller, Assistant State Forester
 Virginia S. Holmes, Fiscal-Personnel Assistant
 Delford F. Furney, Purchase-Property Assistant
 Warehouse, Sumter
 J. P. Watson, Warehouseman

Branch of Information and Education

Walter T. Ahearn, Assistant State Forester
 Nelson L. Peach, Information and Education Assistant
 Claude F. Barden, Information and Education Assistant
 Sign and Woodworking Shop, Sumter
 Olin M. Ballentine, Foreman

Branch of Forest Management

E. C. Pickens, Assistant State Forester
 Howard R. Scott, Management Assistant
 John E. Graham, Management Assistant
 E. L. Middleswart, Management Assistant
 C. R. Nichols, Jr., Management Assistant
 Sand Hills State Forest, Patrick
 Randolph B. Lee, Director
 Clyde C. Rice, Research Forester
 Joseph D. Mills, Forester
 Richard C. Ellis, Forester
 Bennett S. Rose, Jr., Forester
 Marvin W. Spearman, Forester
 Manchester State Forest, Wedgefield
 Robert N. McCombs, Director
 Horace L. Tilghman Nursery, Wedgefield
 L. M. Staley, Nurseryman
 Piedmont Nursery, Pickens
 E. W. Cooler, Jr., Nurseryman
 Coastal Nursery, St. George
 C. Hampton Durr, Nurseryman
 Ridge Nursery, Trenton
 David D. Brown, Nurseryman

Branch of Forest Fire Control

John M. Shirer, Assistant State Forester

J. T. Hance, Fire Control Assistant

W. M. Lindsey, Fire Control Assistant

Hugh M. Westbury, Fire Control Assistant

R. M. Littlejohn, Assistant, Fire Control Communications

J. M. Geddings, Assistant, Fire Control Communications

Equipment and Repair Shop, Sumter

O. P. Woodward, Supervising Mechanic

District Offices

Paul B. Carson, Jr., District Forester, Camden

Robert C. Simmons, Forester, Lancaster

Daniel D. Riddick, Forester, Camden

Roger L. Hagwood, Jr., Forester, Sumter

John K. Weyman, Forester, Camden

L. Hodge Harmon, Forester, Camden

W. O. Morgan, District Ranger, Camden

(Camden District includes counties of: Chesterfield, Kershaw, Lancaster, Lee, Richland, and Sumter)

Alvin E. Kunz, District Forester, Florence

Chas. F. Moore, II, Forester, Florence

Wray E. Freeman, Forester, Bennettsville

John R. Allison, Forester, Conway

Phil L. Hadaway, Forester, Florence

Fred W. Watson, Jr., District Ranger, Florence

(Florence District includes counties of: Darlington, Dillon, Florence, Horry, Marion and Marlboro)

Fred W. Horn, District Forester, Kingstree

Donald W. Horton, Forester, Kingstree

R. B. Rhett, Forester, Kingstree

John R. Grubbs, District Ranger, Kingstree

(Kingstree District includes counties of: Berkeley, Clarendon, Georgetown and Williamsburg)

J. Harlan McLees, District Forester, Newberry

Wm. B. Lawrence, Forester, Newberry

Joel I. Canada, Forester, Newberry

Kenneth C. Clemens, Forester, Greenwood

Melton Wall, District Ranger, Newberry

(Newberry District includes counties of: Abbeville, Chester, Edgefield, Fairfield, Greenwood, Laurens, McCormick, Newberry and Saluda)

Marvin T. Gaffney, District Forester, Orangeburg
 Maurice C. Coleman, Forester, Orangeburg
 Henry G. Brown, Jr., Forester, Lexington
 E. G. Lambrecht, Forester, Orangeburg
 Albert P. Richardson, III, Forester, Orangeburg
 Robert E. Beach, Forester, Aiken
 Adrian Lee Pardue, District Ranger, Aiken
 (Orangeburg District includes counties of: Aiken, Allendale, Bamberg, Barnwell, Calhoun, Lexington and Orangeburg)

Wilbur H. Reames, District Forester, Spartanburg
 Ralph W. Evans, Forester, Pickens
 Paul W. Traylor, Forester, Spartanburg
 Robert J. Gould, Forester, Gaffney
 William H. Shannon, Forester, Spartanburg
 Legare M. Duke, Forester, Spartanburg
 John W. Little, Forester, Walhalla
 C. W. Haynes, Forester, Pickens
 Chas. E. Turpin, District Ranger, Spartanburg
 (Spartanburg District includes counties of: Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg, Union and York)

C. C. Rountree, Jr., District Forester, Walterboro
 Jack F. Young, Forester, Walterboro
 Jas. H. Ryan, Jr., Forester, Walterboro
 Hugh T. Gore, Forester, Walterboro
 E. H. Benton, District Ranger, Walterboro
 (Walterboro District includes counties of: Beaufort, Charleston, Colleton, Dorchester, Hampton and Jasper)

Protection Units

Abbeville Unit Ranger, Charlie Shaw, Lowndesville
 Aiken Unit Ranger, J. Ramie Yonce, Aiken
 Allendale Unit Ranger, Hugh F. Folk, Allendale
 Anderson Unit Ranger, John E. Embler, Anderson
 Bamberg Unit Ranger, P. H. Cave, Olar
 Barnwell Unit Ranger, W. R. Moore, Barnwell

Beaufort Unit Ranger, W. Heyward Graves, Beaufort
 Berkeley Unit Ranger, C. L. Wyndham, Moncks Corner
 Calhoun Unit Ranger, Hampie F. Ott, St. Matthews
 Charleston Unit Ranger, J. I. Garvin, Charleston
 Cherokee Unit Ranger, B. T. White, Gaffney
 Chester Unit Ranger, John S. Stone, III, Chester
 Chesterfield Unit Ranger, W. M. Smith, Chesterfield
 Clarendon Unit Ranger, Elliott E. Rose, Manning
 Colleton Unit Ranger, Glenn B. Britt, Walterboro
 Darlington Unit Ranger, Alton Yarborough, Darlington
 Dillon Unit Ranger, Ernest S. Oliver, Dillon
 Dorchester Unit Ranger, Cecil E. Kizer, St. George
 Edgefield Unit Ranger, S. G. Reel, Edgefield
 Fairfield Unit Ranger, R. E. Patrick, Winnsboro
 Florence Unit Ranger, Hugh Cusaac, Florence
 Georgetown Unit Ranger, Laurin T. Sessions, Georgetown
 Greenville Unit Ranger, Elisha L. Burgess, Greenville
 Greenwood Unit Ranger, James C. Smith, Jr., Greenwood
 Hampton Unit Ranger, Buddy Waldo Hiers, Varnville
 Horry Unit Ranger, James T. Jones, Conway
 Jasper Unit Ranger, Hugh L. Vaigneur, Ridgeland
 Kershaw Unit Ranger, Sidney H. Kirkland, Jr., Camden
 Lancaster Unit Ranger, A. A. Plyler, Lancaster
 Laurens Unit Ranger, Thos. F. Hill, Laurens
 Lee Unit Ranger, E. A. Hall, Bishopville
 Lexington Unit Ranger, V. S. Bickley, Lexington
 Marion County Ranger, Hoyt Collins, Marion
 Marlboro Unit Ranger, Jesse Adams, Jr., Bennettsville
 McCormick Unit Ranger, G. L. Sharpton, McCormick
 Newberry Unit Ranger, Marvin E. Wilson, Newberry
 Oconee Unit Ranger, James D. Thrift, Walhalla
 Orangeburg Unit Ranger, A. St. Clair Price, Orangeburg
 Pickens Unit Ranger, C. H. Gravely, Pickens
 Richland Unit Ranger, T. W. Cooper, Columbia
 Saluda Unit Ranger, Steve Shaw Rushton, Saluda
 Spartanburg Unit Ranger, Milton E. McMillin, Spartanburg
 Sumter Unit Ranger, L. G. Cubbage, Sumter
 Union Unit Ranger, James G. Long, Union
 Williamsburg Unit Ranger, F. W. Fairey, Jr., Kingstree
 York Unit Ranger, E. G. Foster, York

DIVISION OF STATE PARKS

C. West Jacocks, State Park Director

E. R. Vreeland, Assistant State Park Director—Operations

F. Marion Dwight, Assistant State Park Director—Historical

State Park Superintendents

Aiken State Park, James B. Cothran, Windsor

Andrew Jackson Historical State Park, Cecil S. Hayes, Route
1, Lancaster

Barnwell State Park, Mrs. D. I. Ross, Blackville

*Cheraw State Park, George T. Holder, Cheraw

Chester State Park, Clarence Doster, Chester

Croft State Park, M. D. Camby, Pauline

Edisto Beach State Park, John R. Gregerson, Edisto Island

Givhans Ferry State Park, William Wiggins, Jr., Ridgeville

*Greenwood State Park, Keith M. Fleischmann, Ninety Six

*Hunting Island State Park, Van W. Pressley, Frogmore

*Huntington Beach State Park, Norman B. Cooler, Murrells
Inlet

Kings Mountain State Park, Raymond M. Sisk, Kings Creek

Lee State Park, Joe Frank Watson, Bishopville

Little Pee Dee State Park, LaFon Norton, Dillon

Myrtle Beach State Park, T. F. Barbie, Jr., Myrtle Beach

Oconee State Park, James W. Ray, Walhalla

Old Dorchester State Historical Site, H. C. Johnston, Sum-
merville

Paris Mountain State Park, Ed H. Miller, Greenville

*Pleasant Ridge State Park, LeRoy Smith, Cleveland

*Poinsett State Park, L. Storm Bailey, Wedgefield

Rivers Bridge State Park, E. B. Mobley, Ehrhardt

Rose Hill State Historical Site, Vacancy, Union

Santee State Park, G. B. LaBoon, Santee

Sesquicentennial State Park, Marshall D. Holder, Columbia

Table Rock State Park, Robert G. Jones, Pickens

Colleton Wayside Park, Willard Risher, Canadys

* Includes area for Negroes.

State Park Advisory Committee

J. D. Carroll
Lexington

Cecil D. McDaniel
Box 347
Beaufort

Wayne Freeman
Greenville News
Greenville

Harold A. Petit
S. C. Electric & Gas Co.
P. O. Box 952
Charleston

Harry R. E. Hampton
Care The State Newspaper
Columbia

Thomas Moore Craig
Moore

Bennet Moore
Cheraw

Mrs. Jack Bryant
Orangeburg

FOREST MANAGEMENT

SUMMARY

The forest management program has remained at about the same level of operation for the past four years with the addition of only one man during the four-year period. The major emphasis of the Commission's management program was directed toward assisting small private owners in the management of their woodland properties. The lack of forest management on these properties remains the No. 1 forestry problem in South Carolina.

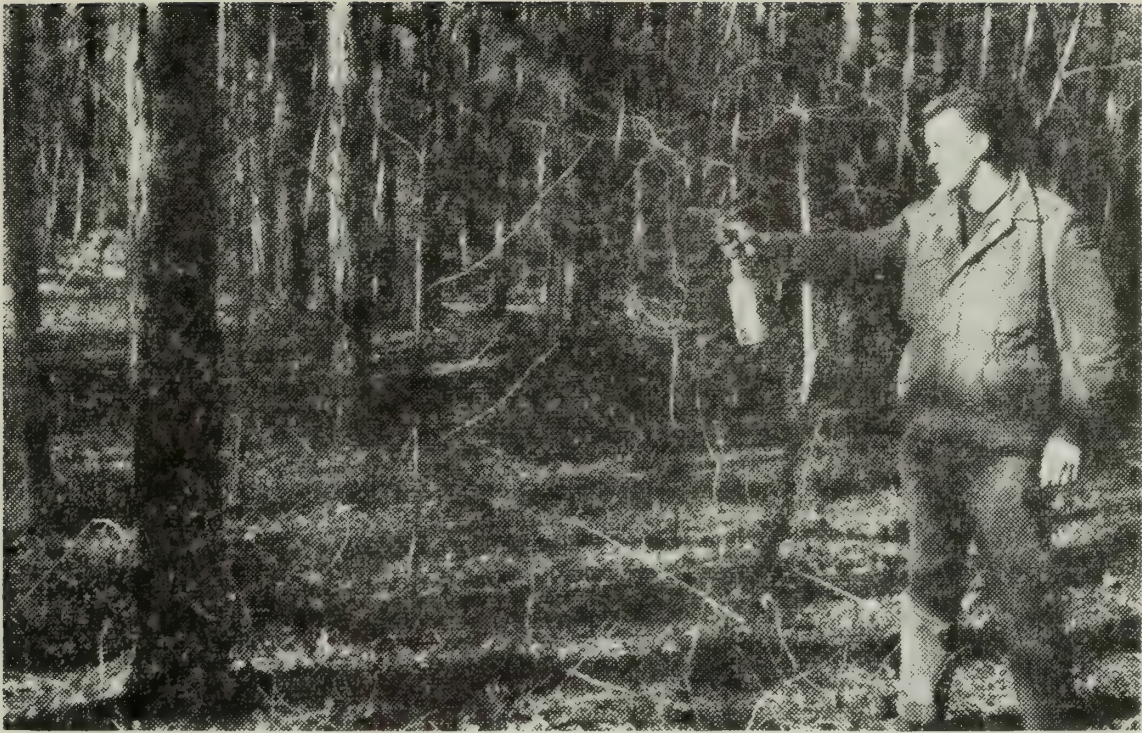
The 1957 Forest Survey shows 77 percent of South Carolina's woodland owned by small private landowners; public ownership was 9 percent and industry ownership 14 percent.

Technical forestry personnel of the State Commission of Forestry offer forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to improve the stand, maintain it in a productive condition, harvest timber products or any reforestation work necessary on idle or understocked areas. Also included are recommendations for protection from fire, insects and diseases.

During 1962-63 the Commission had a total of 25 men devoting full time to the forest management program, including the small watershed activities. These 25 men assisted 1,991 landowners with primary forest management plans and handled 2,013 requests for the Agricultural Stabilization and Conservation Service. Two hundred twenty-nine field inspections of Conservation Reserve plantings were made. These men also marked 484 tracts covering 11,675 acres, amounting to 13,358,810 board feet and 11,628 cords. There were eight active watershed projects on which critical area planting and gully control work was carried out.

The personnel were just able to keep up with requests from landowners for forest management assistance. In some areas requests could not be handled for two to four weeks after being received.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowners to



Commission foresters marked timber on 484 tracts as they assisted landowners with the sale of 11,628 cords of pulpwood and 13,358,810 board feet of sawtimber from 11,675 acres of timberland.

employ a private consulting forester. Commission foresters also work closely with industry foresters who give direct assistance to landowners. More details regarding consulting forester activities will be found in a separate section under Management Assistance.

Landowners continue to receive reasonably good prices for selectively marked sawtimber and pulpwood. The demand for all forest products was somewhat lower and prices were down as much as 30 percent in some areas for lower quality products when compared to 1956 prices and demand. A much more detailed report of this will be found later in this report.

The 1963 Legislature transferred the responsibility for forest pest control work from the State Crop Pest Commission to the S. C. State Commission of Forestry. As a result, it was necessary to rework the agreement between the State Crop Pest Commission, U. S. Forest Service, and the State Forestry Commission. New working arrangements have been completed.

The southern pine beetle epidemic which killed an estimated 12 to 15 million board feet of timber in 1962 has subsided; however, a few hot spots remain and control efforts and surveillance are being maintained. A more complete discussion of this will be found further on in this report.

The Commission continued to work with Clemson College in research programs. A number of studies were continued and one major new study was undertaken. Other projects will be initiated in 1963-64.

There were 9 active small watershed projects during 1962-63. Four new projects were approved for operation beginning with the 1963-64 fiscal year. Only nine of these projects will require gully control and tree planting work.

Working agreements were completed with an additional number of the state's Soil Conservation Districts, bringing the total to 40 now signed. Only five Soil Conservation Districts do not have a working agreement with the State Forestry Commission.

The Management Branch continued to give training to qualified rangers on some non-fire jobs such as insect and disease control activities and some phase of the A.S.C. Program. One county, Chester, employed a technical forester as county ranger. This ranger handled not only fire protection work but the forest management assistance program for the county. It is expected that two more counties will employ technical men to administer the fire protection program and to handle the management assistance work in those counties. These replacements are added as certain ranger jobs become vacant due to resignations, retirement, etc.

The State Commission of Forestry continued to operate four state forests. Combined area of these state forests represents about one percent of the total forest area of the state. Experimental and demonstration work and all forms of forest management activities were continued on these forests. Approximately 15 percent of the total land area in the state forests are still unproductive and major emphasis in management continues to be directed toward reforestation of these non-productive areas. The special program to speed up rehabilitation of unproductive scrub oak lands on the state forests continued to make good progress. Almost 24,000 acres have been cleared and reforested since the program was authorized three years ago. All of this work is accomplished with receipts from state forest timber sales, rentals, etc.

MANAGEMENT ASSISTANCE

The 25 man years of forest management technical time of field foresters was directed toward assisting private landowners with

their woodland management problems. The three Clemson College Extension foresters assisted in this program, primarily with promotional and technical effort.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, insect and disease control and protection, and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is seventy-five cents per thousand board feet and twenty-five cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seed-bed preparation, control of the "brown spot" disease of longleaf pine and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis with the landowner of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and District Office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,400 telephone calls regarding insect and disease control and made more than 600 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

During the year, Commission foresters made 1,991 examinations on 215,455 acres of forest land, and selectively marked

13,358,810 board feet and 11,628 cords for 484 landowners on 11,675 acres of forest land. The following table shows the continuous increase in woodland examinations and selective marking assistance that has been rendered since the Forest Management Act was passed by the 1941 Legislature.

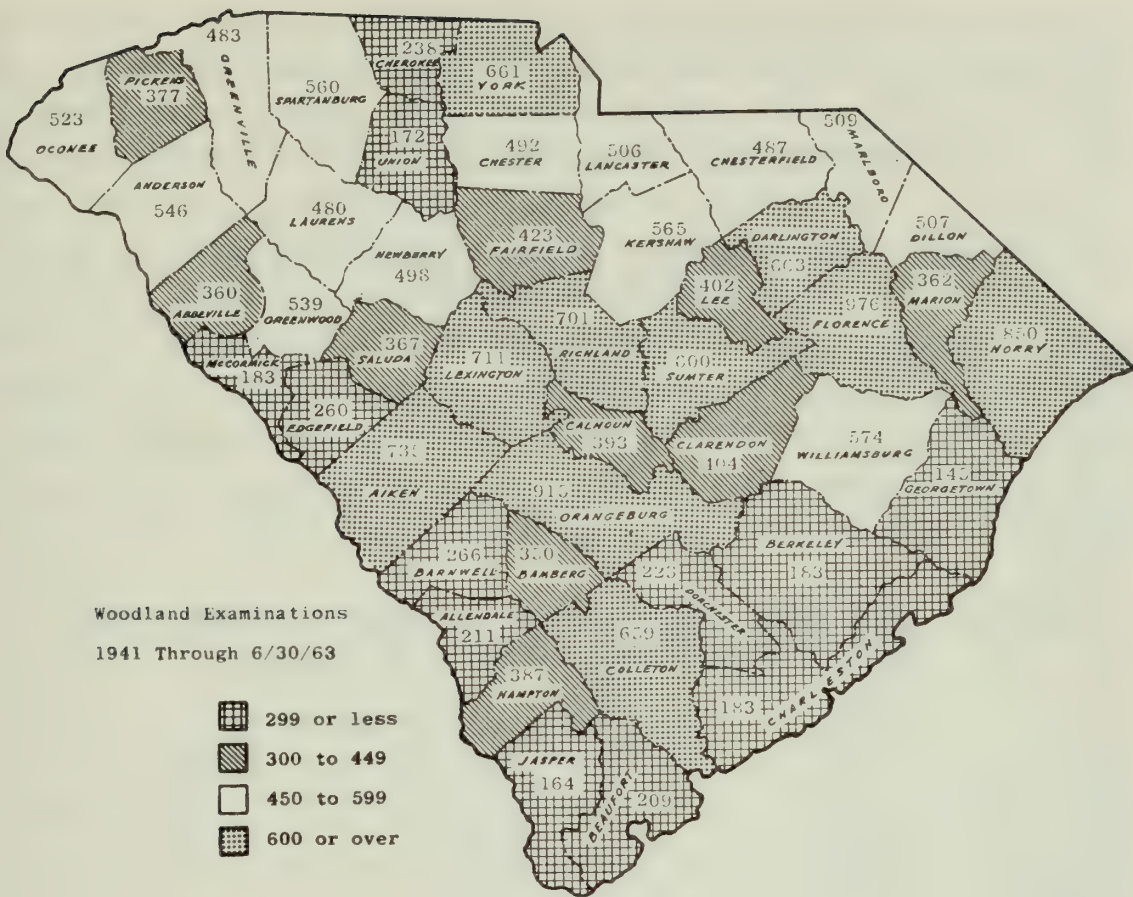
FOREST MANAGEMENT ASSISTANCE

Summary by Years

	Number of Woodland Examinations	Woodland Acreage	Number of Landowners	Timber Marking		
				Woodland Acreage	Board Feet Timber	Cords Pulpwood
1941-42	213	37,500	84	14,792	8,271,202	-----
1942-43	145	62,204	59	8,769	13,851,707	862
1943-44	170	85,300	121	15,407	25,515,145	1,231
1944-45	309	161,412	108	15,359	16,033,407	639
1945-46	256	80,800	78	12,591	15,292,532	546
1946-47	445	105,896	203	18,408	24,735,103	4,237
1947-48	545	148,577	208	13,477	19,788,388	3,500
1948-49	706	126,600	235	13,768	22,009,336	4,429
1949-50	880	163,334	242	8,427	13,283,940	3,385
1950-51	998	173,057	339	14,275	19,634,153	3,896
1951-52	919	170,948	288	11,931	18,031,822	3,089
1952-53	931	142,054	315	12,109	16,332,715	3,935
1953-54	945	143,347	331	8,864	12,264,641	8,467
1954-55	1,166	184,754	399	9,477	13,875,377	5,162
1955-56	1,322	191,143	393	10,973	16,246,795	9,167
1956-57	1,148	163,479	304	8,248	11,365,157	6,008
1957-58	1,423	208,821	394	12,305	14,443,209	7,881
1958-59	1,693	196,529	403	14,374	18,552,478	6,419
1959-60	2,015	230,691	521	17,936	19,920,743	9,432
1960-61	1,954	246,372	411	13,137	13,463,463	8,046
1961-62	1,956	209,127	520	13,107	14,646,297	11,123
1962-63	1,991	215,455	484	11,675	13,358,810	11,628
Totals	22,130	3,447,400	6,440	279,409	360,916,420	113,082

Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to control the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees. This cull tree removal program is probably the largest single forest management problem facing South Carolina woodland owners.

Field foresters of the Commission are responsible for checking all areas where landowners request forest practices to be carried out on their property under the Agricultural Conservation Program. In 1962 a total of 2,285 landowners accomplished one or more forestry practices under the Agricultural Conservaion



Program. Field checks were required and made by Commission field foresters on 2,013 of these properties.

Commission foresters were able to service requests for assistance with not more than about one month's delay on any requests. Most projects had one to four weeks work scheduled ahead. There was a slight decrease in ACP requests which allowed the foresters to keep up with the work a little more closely than they had in the past.

CONSULTING FORESTER ACTIVITY

Commission and Extension foresters continued to follow the practice of referring all larger jobs to consulting and industry foresters wherever practical. Our records show 229 jobs referred to consulting foresters and 29 jobs referred to industry foresters during the year where properties were examined by Commission or Extension personnel. It is estimated that another 150 jobs were referred to consulting foresters through contact with Commission and Extension foresters but where no field work was done by Commission personnel.

The Commission again assisted consulting foresters with a training school for these men at our Burnt Gin group camp in Sumter County. This marked the fourth school or conference that the Commission had assisted consultants to hold. We believe our policy of promoting as much forest management work as possible through consulting forester activity has kept South Carolina well up among the leaders in an overall forest management program. There are more consulting foresters in South Carolina based on per acre woodland area than any state in the United States according to the best information that we have.

Stumpage prices received from marked sawtimber and pulpwood for the past five years are shown in the following table:

**SAWTIMBER AND PULPWOOD STUMPAGE PRICES FOR
SOUTH CAROLINA—FIVE-YEAR PERIOD**

Fiscal Year	Weighted Average Stumpage price Per M Board Feet	Weighted Average Stumpage price Per standard cord
1957-58 -----	\$35.72	\$5.86
1958-59 -----	37.00	5.75
1959-60 -----	39.22	6.76
1960-61 -----	36.93	6.37
1961-62 -----	33.89	6.43
1962-63 -----	32.56	6.24

Sawtimber prices showed a definite downward tendency during most of the year. Pulpwood prices were fairly steady. The average price for marked sawtimber on sales reported shows only a five percent decline. In some localities in the state, the downward trend was more pronounced than was shown by these reports. The demand appears to be steady now, although an upward trend has not yet appeared. Landowners who sold timber without forestry advice and assistance averaged far less for their timber than those who did receive forestry assistance.

A record high production of pulpwood occurred in 1962 with increase in both pine and hardwood production. Production of round pulpwood increased 6% over 1961; utilization of wood residues increased 19% over 1961; and the total production in South Carolina increased 8%, compared to a 6% increase for the South as a whole.

The use of wood residues particularly chips from slabs has shown a tremendous increase in the last five years. The 1962 pulpwood production report showed 389,467 cords from chips. This is almost 20% of the total pulpwood production.

Lumber Production in South Carolina 1936 to 1962
(In Million Board Feet)

Year	Softwoods	Hardwoods	Totals
1936	610.2	169.8	780.0
1937	572.6	167.4	740.0
1938	577.1	182.9	760.0
1939	643.5	200.5	844.0
1940	682.3	190.2	872.5
1941	879.9	231.0	1,110.9
1942	886.3	196.9	1,083.2
1943	800.3	200.9	1,001.2
1944	708.0	194.1	902.1
1945	550.6	176.1	726.7
1946	748.5	245.0	993.5
1947	685.7	185.4	871.1
1948	-----	-----	-----
1949	636.7	167.4	804.1
1950	719.8	231.6	951.4
1951	678.0	234.8	912.8
1952	722.0	236.0	958.0
1953	705.0	216.0	921.0
1954	626.0	190.9	816.9
1955	621.0	201.0	822.0
1956	628.0	199.0	827.0
1957	650.0	245.4	895.4
*1958	630.0	220.0	850.0
*1959	650.0	220.0	870.0
*1960	630.0	220.0	850.0
*1961	620.0	220.0	840.0
*1962	620.0	220.0	840.0

* Estimated

Veneer cut in South Carolina adds up to about 150 million board feet annually. Poles and piling and cooperage amount to approximately 40 million board feet annually.

Round Pulpwood Production in South Carolina, 1936-1962
(In Thousand Cords)

Year	Pine	Hardwood	Total
1936	35.8	12.8	48.6
1937	364.4	29.3	393.7
1938	262.7	21.6	384.3
1939	533.6	17.0	550.6
1940	602.8	67.5	670.3
1941	744.0	55.5	799.5
1942	863.0	44.2	907.2
1943	954.0	32.6	986.6
1944	1,010.0	43.5	1,053.5
1945	823.8	53.7	877.5
1946	909.2	112.8	1,022.0
1947	862.6	85.7	948.3
1948	1,000.1	108.4	1,108.5
1949	913.5	98.7	1,012.2
1950	1,068.6	113.8	1,182.4
1951	1,105.2	145.8	1,251.0
1952	1,132.5	143.2	1,275.7
1953	1,273.4	172.8	1,446.2
1954	1,160.5	170.4	1,330.9
1955	1,268.7	244.6	1,513.3
1956	1,582.9	223.7	1,806.6
1957	1,384.7	270.3	1,655.0
1958	1,346.3	246.4	1,592.7
1959	1,342.1	367.8	1,709.9
1960	1,515.0	386.8	1,901.8
1961	1,535.7	428.9	1,964.7
1962	1,615.2	476.8	2,092.0

No new large sawmills located within the state during the year. Mills requiring large logs and high quality veneer logs are finding it more difficult to locate suitable standing timber.

Substantial expansions and additions to the pulp and paper industry in South Carolina were made during the year. Expansion of nearby out of state pulp and paper mills also provides additional markets for South Carolina timber growers.

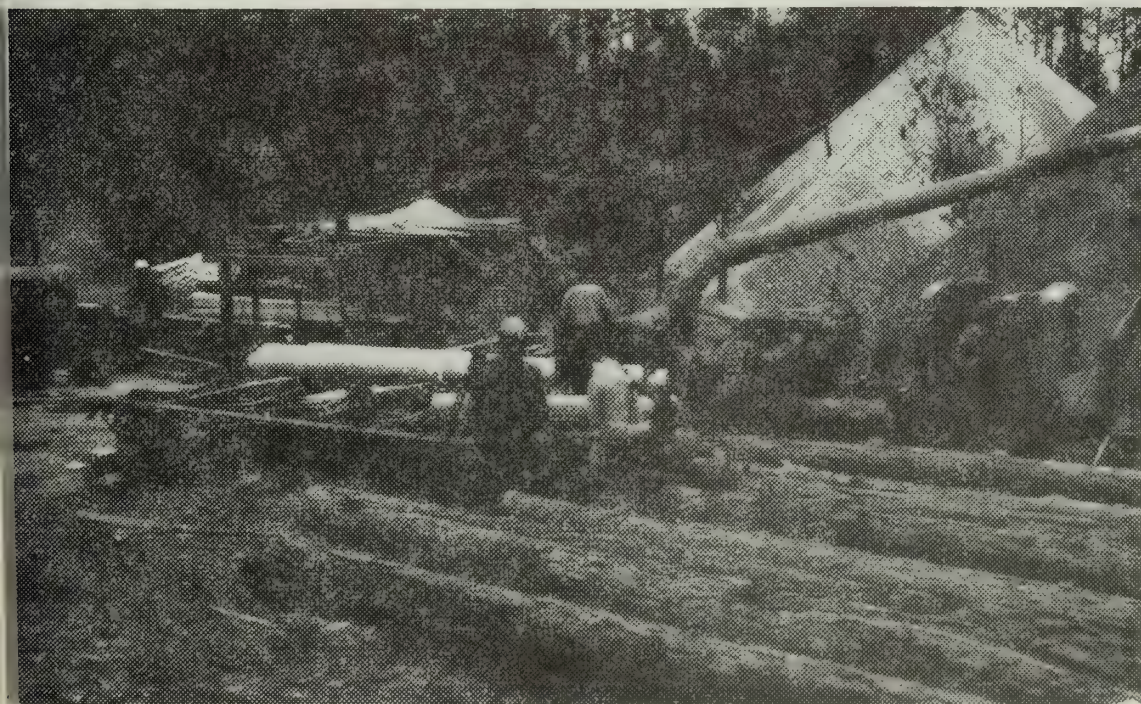
On May 24, 1962 the Stone Container Corporation of Chicago announced plans to build a 24-million dollar kraft paperboard mill on the Great Pee Dee River near Florence. The mill is expected to be in operation in April 1964 under the name South

Carolina Industries, Inc. It will provide employment for 300 persons initially, with an annual payroll of approximately \$2,000,000. The new mill will provide an additional market for farmers and other woodland owners. Wood to be used at the plant will be mostly pine bought from farmers and others at an estimated cost of some \$6,000,000 a year. Some hardwood will also be used by the company. Plans call for initial production of 400 tons of kraft per day, to be expanded to 1,000 tons a day, indicating employment might eventually reach 800.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired full time or part time foresters.

The pulp and paper companies continued to furnish the services of their foresters to assist landowners with proper thinning of pulpwood. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.



The decline in number of sawmills in the state was accompanied by the addition of debarkers and chippers at many mills still operating to debark and chip slabs and edgings to sell for pulp.

Commission foresters checked in the field approximately 600 properties for insect and disease damage. Recommendations were given the owners regarding treatments necessary to control or check the spread of the diseases or insects. More than 1400 telephone calls were answered regarding insect or disease where no field check was necessary.

FOREST PRODUCTS INDUSTRY SURVEY

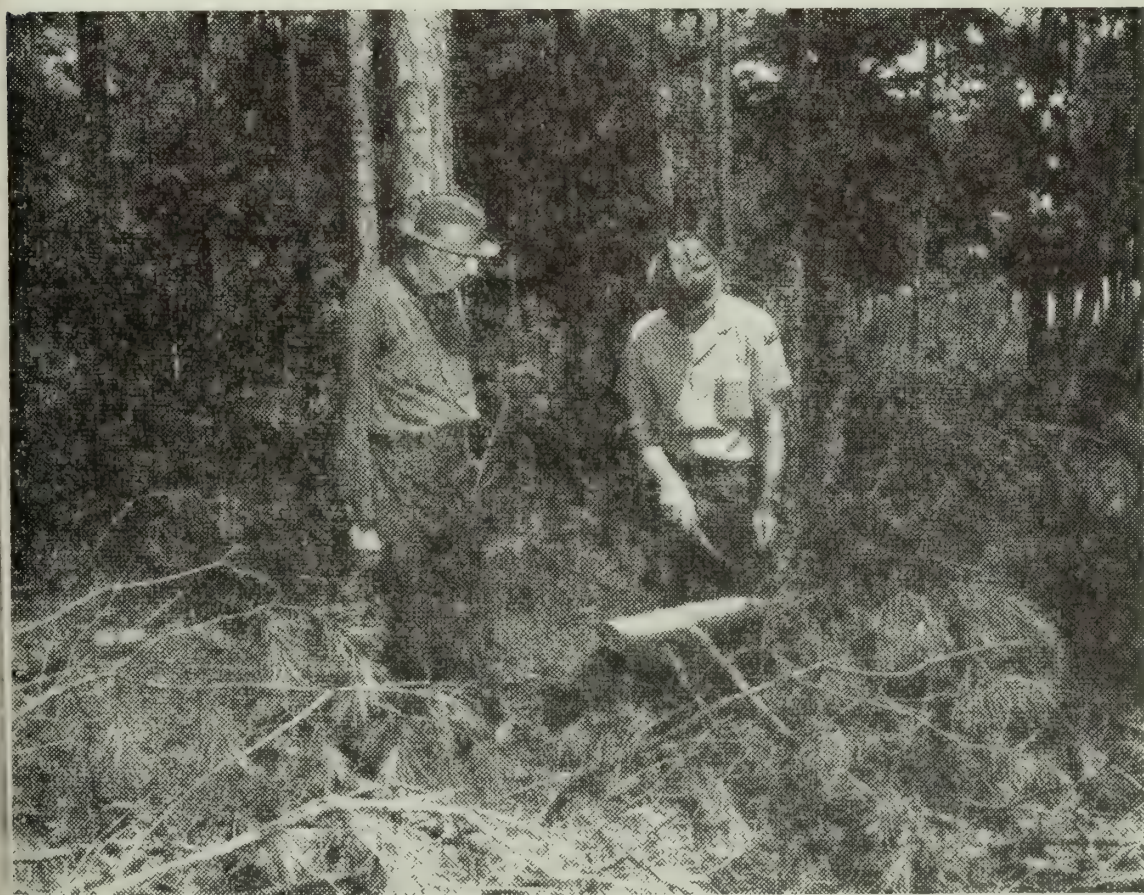
In the summer of 1962 Commission and Extension foresters contacted all forest products buyers in the state. A complete new directory of sawmills and other information concerning buyers of wood products was made. This survey showed that the number of sawmills in South Carolina had declined from 594 mills in 1958 to 413 in 1962. The following table lists some of the pertinent information obtained in this survey:

Annual Capacity—Thousand Board Feet—	
All Mills	1,047,823,000
Daily Capacity—Thousand Board Feet—All Mills..	4,351,000
Annual Capacity Part-Time Mills—	
Thousand Board Feet	114,395,000
Annual Capacity Full-Time Mills—	
Thousand Board Feet	881,474,000
Number Mills Using All Pine	119
Number Mills Using All Hardwood	27
Number Mills Using Both Pine & Hardwood	245
Number Portable Mills in State	197
Number Stationary Mills in State	194
Total Sawmills in State	413
Number Planing Mills in State	25
Number Sawmills Custom Sawing only	22
Number Mills Cutting Full Time	247
Number Mills Cutting Part Time	166
Total Number Sawmill Employees	7,770
Total Number Part Time Sawmill Employees	1,243
Number Employees in Veneer & Miscellaneous	5,594
Total Number Sawmill, Veneer & Miscellaneous Employees	14,607
Number Veneer Mills	31
Number Mills Using Debarkers	136
Number Mills Using Chippers	91
Annual Capacity—Thousand Board Feet—	
Veneer Mills	92,658,000

SOUTHERN PINE BEETLE CONTROL ACTIVITIES

The southern pine beetle epidemic in the Piedmont of South Carolina which began in 1960 and 1961 became more serious during late summer of 1962. A survey in mid-June, 1962, estimated 108,000 pine trees to be infested by the insect. In September another survey estimated an increase to 346,000 infested trees.

During the epidemic estimates indicate that around 250,000 trees were salvaged or sprayed to utilize wood and control the beetles. Most of this control work was done by large landowners such as pulp and paper companies and the U. S. Forest Service on public lands. Commission foresters assisted all private owners with control activities. Total loss was estimated at 1,500,000 trees through 1962.



The survey of southern pine beetle damage showed a great reduction in beetles in the piedmont and an increase in Berkeley County. Above, a forester checks a tree top for beetles left after a salvage cut.

In June and July of 1963 a survey of southern pine beetle conditions was made in 19 Piedmont counties, Berkeley County and northern Charleston County. The survey estimated 26,000 infested trees in the Piedmont and 20,000 infested trees in the Berkeley-Charleston County area. This survey revealed a great

Equipment Maintenance Shop:

The Fire Control Branch operates a Central Repair Shop at Sumter where heavy and specialized repairs are made to all fire control equipment. Three traveling mechanics, headquartered at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator and the district mechanic, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 984 complete field inspections of equipment and conducted 1,276 field repair jobs.

Central Shop personnel at Sumter made many repairs to automotive equipment owned by the Commission and manufactured many items necessary for field use. Some of the work handled by the mechanical force is listed below.

Major repairs were made to 42 light tractors, 15 heavy tractors, 54 light trucks, 30 heavy trucks, 8 light plows, 3 heavy plows, 2 light trailers, and 6 heavy trailers. Minor repairs were made to 3 light tractors, 4 heavy tractors, 7 light trucks, and 2 heavy trucks.

In addition to repair work, many items were manufactured at the Central Shop. Work done included modifying or building equipment bodies, making booster tanks, radio boxes, and equipment racks. Repairing and putting into service surplus equipment is also done at the Central Repair Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. These facilities are used for warehousing certain materials and supplies necessary for the efficient operation of each of the forestry districts and by the mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district. The traveling mechanics who operate from the Central Repair Shop at Sumter also use the shops in assisting the local mechanics to more effectively keep all motorized equipment in good operating condition at all times and to make any necessary repairs which may be needed locally.

Columbia Radio Repair Shop:

During the summer and fall of 1958, a new Central Radio Communications Maintenance and Repair Shop was erected at 241 Catawba Avenue in Columbia. This building is being used as a central headquarters for all radio communications installations, maintenance, and repairs for the entire state. This Central Radio Shop coordinates the activities of all district radio technicians who are assigned to district repair shops in the various forest service districts.

Fire Control Maps:

A new map laboratory was installed in one section of the Central Radio Repair Shop during fiscal year 1958-59. This laboratory, complete with drafting room and map-making equipment and facilities, is being used to produce all forest fire control maps which are needed by district and county unit personnel in carrying out fire protection activities within the state.

Radio:

The program of dual channeling all radio equipment in 5 districts was completed in Florence and Orangeburg Districts. The channels assigned to these two districts are 159.450 Mc. and the original 159.270 Mc.

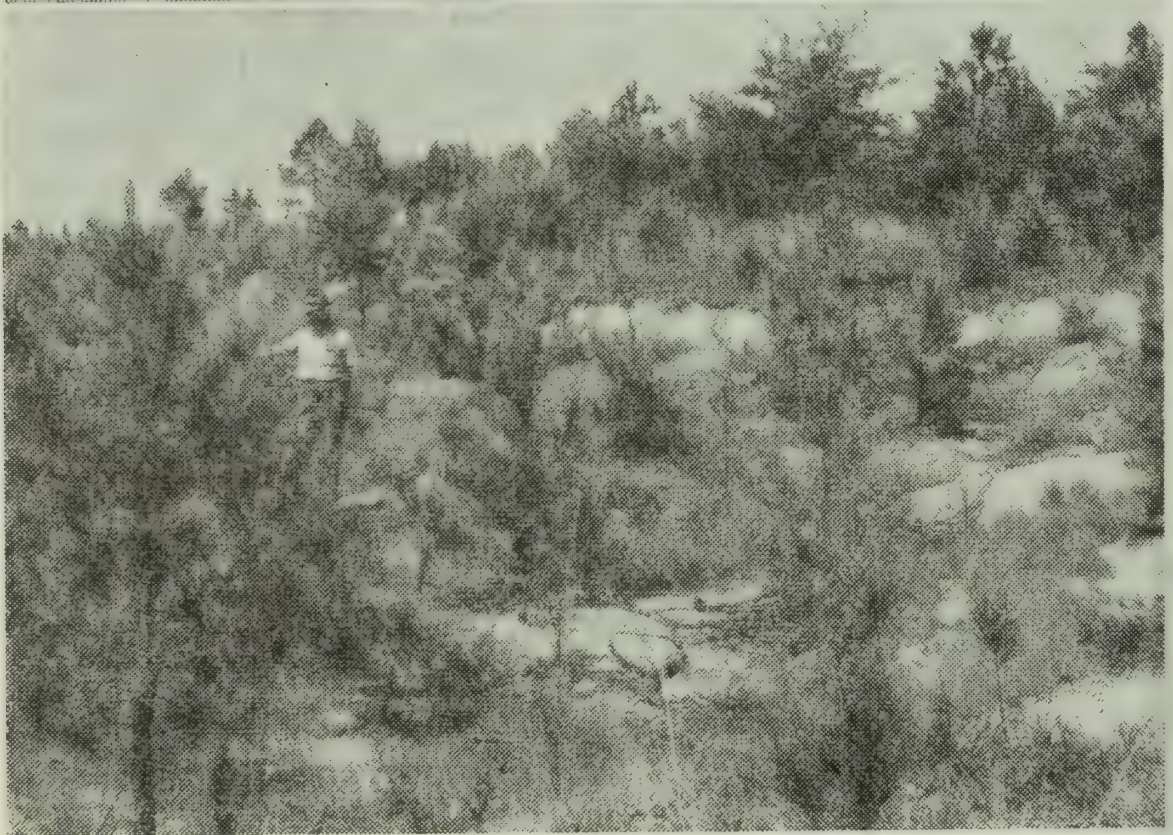
This same dual-channel conversion is now in progress in Kingstree and Newberry Districts on 159.375 Mc. and 159.270 Mc.

Use of this additional channel has greatly reduced the radio interference between districts and affords much more reliable communications.

A seventh district radio technician was employed and will be designated as the Newberry District Technician.

Use of Aircraft in Fire Control:

Radio-equipped planes are used on a contract basis when necessary to supplement the lookout towers. During periods of low visibility, towers cannot adequately cover their area of responsibility and, without the use of airplanes, many fires would occur and burn for a long period of time undetected before being discovered and reported to the fire control organization. Whenever large fires occur, planes are also used to direct the actions of the ground suppression forces. During periods of high fire occur-



The beneficial effects of check dams, weeping love grass and planted trees in soil stabilization and erosion control is shown in before and after pictures taken three years apart.

Activities During Year:

Critical area tree planting was reduced this year with 24,400 trees planted on 26.5 acres. Five new properties were planted with 20,750 trees on 26.5 acres and 3,650 pines were replanted on nine properties previously planted. A total of 17,300 trees were planted on 18 acres for watershed protection. Hydrologic stand improvement was carried out on 70 acres by landowners.

Woodland management assistance was given to 18 landowners on 424 acres. Sawtimber and pulpwood was marked on five tracts covering 83 acres. Two low grade hardwood elimination plots were established on the property of F. W. Smith. Dybar, fenuron weed and brush killer, pellets were applied on inferior hardwood areas under differing conditions. These plots along with established tree injector plots serve as demonstration areas. The watershed experienced an excellent fire record. No fires were reported in spite of a critical fire record.

WATEREE CREEK WATERSHED PROJECT

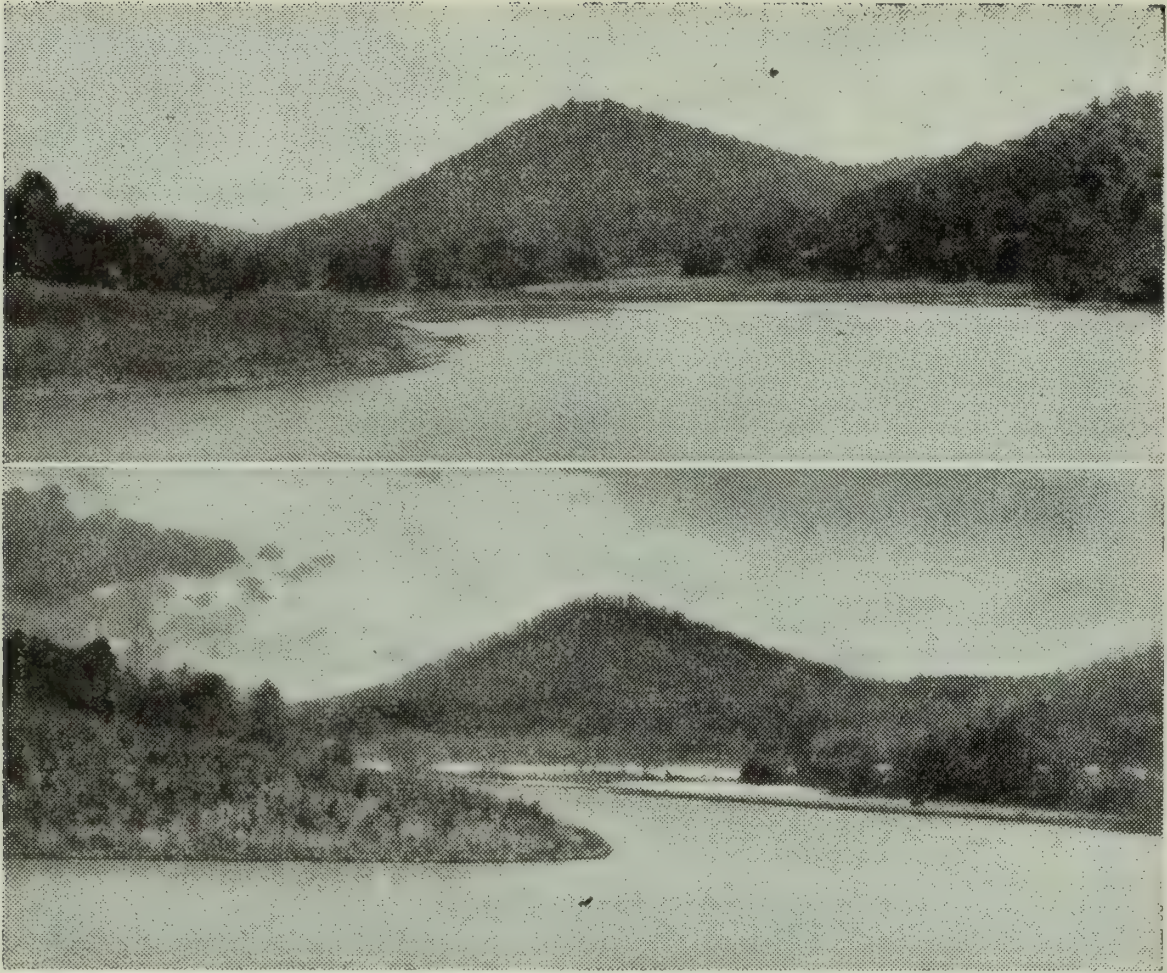
This was the fourth year for this watershed project. Planting and site preparation work was accomplished on seven different tracts during the fiscal year. A total of 23,500 loblolly pines were also planted on the watershed. Love grass was planted on tracts that work had been accomplished on in previous years. Also, previously built brush dams were refurbished on several tracts along with the love grass planting. One landowner provided sericea lespedeza mulch and trees were then planted in this. As was noted in June, seedling survival of trees planted this year appears to be good.

A total of 240 acres of critically eroding area has been planted to trees and other work was done to stop the erosion. Most of the planned work for this project is completed.

HUFF CREEK WATERSHED PROJECT

Background:

The Huff Creek Watershed covering 21,787 acres has been under active treatment for three years. Loblolly pines totalling 130,000 have been planted on 133 acres of critical areas for flood prevention by the S. C. State Commission of Forestry. A total of 1,299,500 pines have been planted on 1,300 open acres by landowners for watershed protection. Landowners have carried



Small impoundments for flood control, tree planting and other conservation measures for soil stabilization are combined on the seven watershed projects now in operation. The lower of the above pictures shows the result of four years of development.

out hydrologic stand improvement on 213 acres. A Pilot Forest sponsored by a pulp and paper company has been under management for over two years and serves as a good example of proper woodland practices.

Activities During Year:

Critical area tree planting was at a low level during the year with 10,000 loblolly pines planted on 12.3 acres. Seventeen acres were planted for watershed protection and 45 acres were given some type of hydrological stand improvement by landowners. Tree planting activities were reduced this year as the majority of areas needing treatment have been planted with trees or diverted to other uses. Total watershed protection planting of 1,300 acres exceeded work plan estimates by 872 acres, thereby reducing present and future protection and flood prevention tree planting.

Woodland management assistance remained on the same level as previous years with six landowners assisted covering 646 acres.

Sawtimber totalling 221,000 board feet was marked on four tracts.

DUNCAN CREEK WATERSHED PROJECT

This is the first year for this watershed. Agreements of co-operation were signed between the State Commission of Forestry, the Duncan Creek Watershed Conservation District and the Laurens County Soil Conservation District on January 31, 1963, and February 5, 1963, respectively. The agreement was approved by the Regional Forester's Office February 13, 1963, and actual planting work began on February 25, 1963.

Work was accomplished on ten different tracts which covered an area of 79.7 acres. Seventy thousand five-hundred loblolly pine seedlings were planted or interplanted over this acreage. At present survival of these seedlings seems to be good except seedlings that were planted during a dry and windy period which occurred the second week in April.

Cooperation and participation by landowners in the tree planting and site preparation work was good.

THICKETY CREEK WATERSHED PROJECT

This was the first year for operation of this project. Fifty-five acres of critically eroding land was planted to loblolly pine. Nine hundred check dams were constructed to help stop gullies and other site preparation work accomplished. Woodland management advice was given to landowners covering 1,942 acres of woodland. Seventy-three acres of timberland was marked for harvest.

HILLS CREEK WATERSHED PROJECT

This project was authorized during the year; however, no critical area stabilization work was accomplished.

BROADMOUTH CREEK; BEAVERDAM CREEK; LYNCHEs LAKE-CAMP BRANCH PROJECTS

These three watershed project areas have no critical area tree planting and gully control work needed. There is a need for intensified woodland management activities and Commission

foresters are doing this work. Management advice and assistance was given to woodland owners covering 1,046 acres during 1962-63.

NURSERIES

The Commission continued to operate four tree nurseries which produced and distributed to landowners 56,191,241 seedlings for planting during the 1962-63 planting season. An additional 8,010,300 seedlings were brought into the state by others. The cost to South Carolina landowners for seedlings grown at Commission nurseries was \$4.00 per thousand f.o.b. nursery or \$5.00 if the seedlings were shipped to the landowner.

The demand for seedlings decreased during the year. This decrease is attributed to a gradual return to normal demand after the accelerated tree planting experienced through the Conservation Reserve program. Since 1928, a period of some 35 years, one billion two hundred thirty-eight million (1,238,151,254) forest tree seedlings have been planted in South Carolina.

The forest survey which was made in South Carolina during 1958 indicates more than five million acres will have to be planted if they are to be productive. More than three and one-half million acres of this will need site preparation prior to planting. This land, if planted, could bring returns to South Carolina landowners in excess of 30 million dollars per year.

FOREST TREE NURSERY ACTIVITIES

Distribution of Seedlings:

During the year a total of 64,201,541 forest tree seedlings were distributed throughout the state. Of this total 56,191,241 were produced in the four state nurseries.

Loblolly	24,003,976
Slash Pine	27,497,110
Longleaf	3,594,247
Red Cedar	220,995
Yellow Poplar	657,455
White Pine	174,105
Miscellaneous Species	43,353
<hr/>	
Total	56,191,241

In addition to the above seedlings distributed by Commission nurseries, 8,010,300 seedlings were brought into the state or produced in the state by industry nurseries.

Union Bag-Camp Paper Corporation	277,000
Catawba Timber Company	2,076,600
Continental Can Company	2,757,000
J. T. Strahan Company	16,000
Cole Page	1,000
Williams Furniture Company	40,700
West Virginia Pulp & Paper Company	2,812,000
Holly Hill Lumber Company	30,000
Total	8,010,300

Tables No. 10 and No. 11 in the appendix are a record of seedlings distributed by counties and class of ownership. Table No. 12 shows the total acreage planted by counties and acres in need of planting. The following table records the number of seedlings distributed in South Carolina by years, including out-of-state seedlings.

YEAR	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Ins. Other Sources)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255

YEAR	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Ins. Other Sources)
1946-47 -----	1,962,600 -----	1,962,600 -----
1947-48 -----	11,356,990 -----	11,356,990 -----
1948-49 -----	30,338,775 -----	30,338,775 -----
1949-50 -----	29,501,955 -----	29,501,955 -----
1950-51 -----	20,615,315 -----	20,615,315 -----
1951-52 -----	16,619,000 -----	16,619,000 -----
1952-53 -----	22,035,850 -----	32,246,298 -----
1953-54 -----	36,210,100 -----	42,852,314 -----
1954-55 -----	35,373,025 -----	45,182,255 -----
1955-56 -----	34,413,550 -----	42,931,755 -----
1956-57 -----	55,753,600 -----	69,658,736 -----
1957-58 -----	60,846,200 -----	93,369,084 -----
1958-59 -----	123,985,000 -----	166,351,000 -----
1959-60 -----	147,146,365 -----	187,516,418 -----
1960-61 -----	145,609,075 -----	158,330,575 -----
1961-62 -----	71,892,420 -----	83,844,470 -----
1962-63 -----	56,191,241 -----	64,201,541 -----
<hr/>		
Total -----	1,041,123,234 -----	1,238,151,254 -----

Forest Tree Seed Collection:

Each year the Commission collects cones to obtain seed for tree seedling production. Commission foresters locate private collectors in good seed producing areas to obtain the quotas which are set. This year cones and seed were collected as follows: Long-leaf Pine 12,113.5 bushels; Slash Pine 725.0 bushels; Loblolly Pine 493.0 bushels; Yellow Poplar 800.0 pounds; Red Cedar 281 pounds; Black Walnut 26.0 bushels.

The seed extractory was operated for the sixth year with continued good results. Excellent seed have been produced through this extractory with higher quantities and better quality seed being obtained per bushel of cones. The average cost of seed to the state since the operation of the seed extractory is \$1.65 compared to \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Sample plots were taken in July, 1962, to obtain information concerning the cone crop for the fall of 1962 and 1963. Information received indicated that the cone crop for the fall of 1963 would be poor for loblolly pine. Other species were not checked.

Seedling Survival Examination:

After seedlings are outplanted one year by landowners, approximately 10% of the seedlings planted in each county are sampled to determine the over-all state survival rate. Through these examinations, the Forestry Commission can determine steps to take to eliminate future plantation failures on the part of the landowners. This year the over-all state seedling survival rate was estimated at 68% compared to 69% for the previous year.

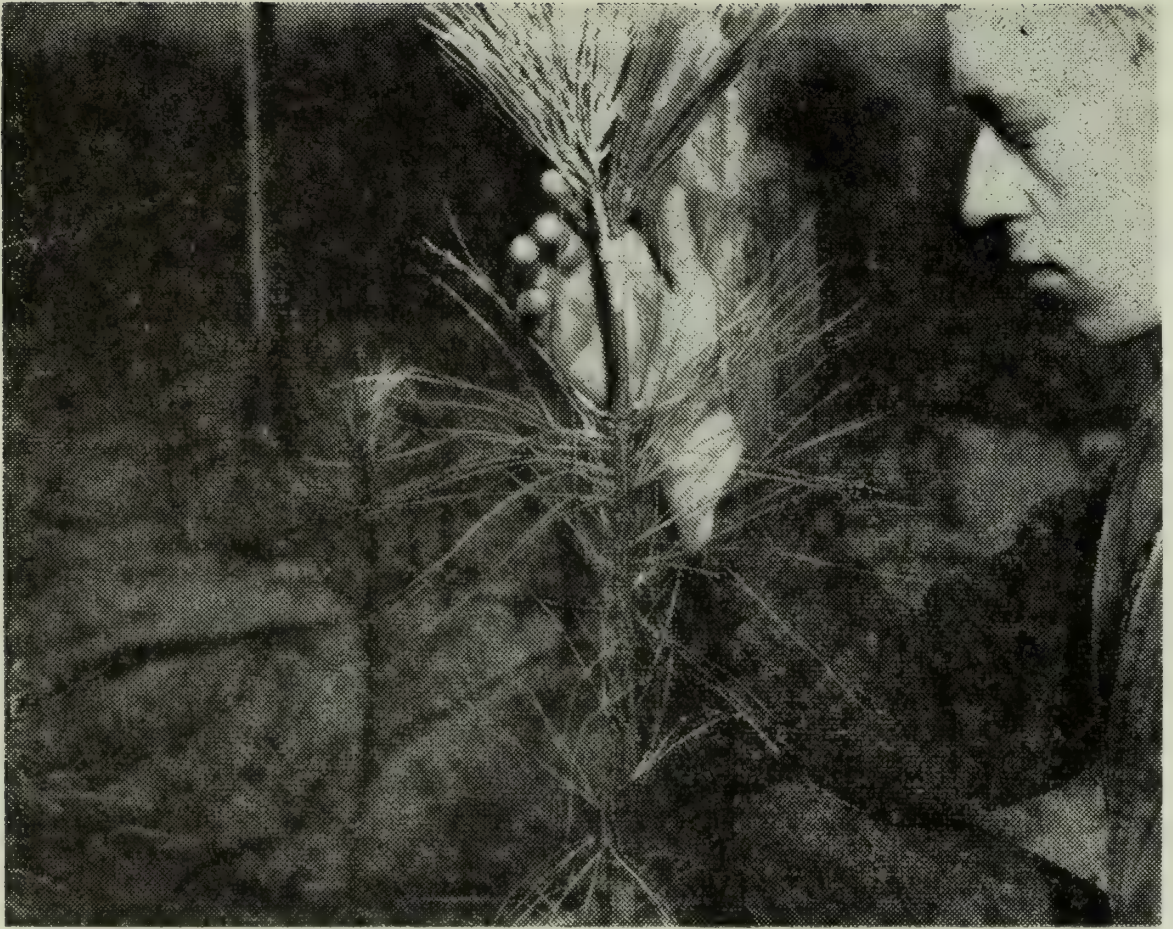
Research:

The nurseries cooperated this year with Clemson College on research studies, some of which were initiated this year and some in previous years. Not as much emphasis was given research as in previous years since seedling production has decreased and sufficient funds and personnel were not available. Several research projects which have been completed in cooperation with Clemson College have been of great assistance in tree seedling production.

Forest Tree Improvement:

Work was continued on a tree improvement program. Definite plans were made to establish a loblolly pine seed orchard on an area of the Manchester State Forest and a slash pine seed orchard at the Coastal Nursery. These orchards will involve approximately 150 acres when completed. All trees in the seed orchards will be grafted stock representing parent trees with superior qualities. This spring 759 grafts were made at Ridge Nursery, 416 at Piedmont Nursery, 100 at Tilghman Nursery and 100 at the Coastal Nursery for a total of 1,375 grafts. These grafts were made on rootstock in nursery seed beds and will be transplanted in the orchards. 699 of the grafts were loblolly pine and 676 were slash pine. 243 grafted plants were purchased from Union Bag-Camp Paper Corporation and planted in the seed orchard. These were grafted plants which were surplus to their needs and will be used primarily as a source of scion material.

On April 1, 1963, the Forestry Commission became a member of the North Carolina State College—Industry Tree Improvement Program. Membership in this program will make available the services of forest geneticists, who will grade superior tree candidates and provide other technical services necessary in a tree improvement program.



The Forestry Commission, a member of the North Carolina State College—Industry Tree Improvement Program, began grafting seedlings with scions from superior trees and established two seed orchards of grafted stock in its continuing tree improvement program.

Anticipated 1963-64 Seedling Production:

Planned production of seedlings for the 1963-64 planting season is approximately 60 million. Species for distribution will include loblolly, slash, longleaf, shortleaf, white pine, Virginia pine, yellow poplar, and red cedar.

Horace L. Tilghman Forest Tree Nursery:

This was the sixteenth year of tree seedling production at the Tilghman Nursery since acquisition of the 104.5 acres of nursery land in 1946. Approximately 80 acres are available for seedling production. The remaining area is used for roads, buildings, supply storage, and seed extractory. The seed bed area allows for an annual production of 38-40 million trees on a 1-1 rotation. During the fiscal year 1962-63, 21,848,112 seedlings were distributed from the Tilghman Nursery. Actual nursery production amounted to 18,461,850 seedlings.

The general soil type is predominantly a red bay sand loam derived from unconsolidated sands and sandy clays of the coastal plains. Being a coarse sand, the soil is subject to heavy leaching when the soil organic matter is allowed to be depleted; therefore, it is imperative that the seedling crops be produced on a 1-1 rotation to allow for intensive soil building practices during alternate years.

Since the nursery was established 476,621,265 seedlings have been produced and distributed.

The irrigation system which was of plastic pipe design did not prove to be satisfactory. One-half of this system was replaced with galvanized pipe during the year and the rest will be replaced during the 1963-64 fiscal year.

Piedmont Forest Tree Nursery:

Land for development of the Piedmont Nursery was acquired in July, 1956, in the northwestern section of Pickens County. A total of 81.5 acres was purchased of which approximately 53 acres are available for tree seedling production. The remaining 28.5 acres constitute roads, stream, building and uncultivable land. The soils range from sandy loam to loamy sand and are principally the Congaree and Wickham types.

During the year 9,770,973 seedlings were produced and shipped. Since this is the sixth year of production, a grand total of 108,939,757 seedlings have been produced and distributed.

Because the soil types in the nursery are of higher quality than in any of the other nurseries, it will be possible to plant part of the area on a 2-1 rotation without seriously depleting the soil fertility. Weeding costs were reduced by the use of Methyl Bromide on the portion of the nursery in use for the 1963-64 seedling production.

Coastal Forest Tree Nursery:

In July, 1957, the state acquired, under a ten-year lease agreement, 100 acres of nursery land located approximately two miles north of St. George, S. C., along U. S. highway 15. Approximately 73 acres are available for seedling production with the remaining acreage being used for buildings, roads and uncultivable land. Included in the lease agreement is a provision for a right-of-way to a water supply reservoir for irrigation purposes.

During the year 13,419,100 seedlings were produced and distributed. In the five years since this nursery has been in production, a total of 164,237,130 seedlings have been produced and distributed.

All of the soil is Norfolk sandy loam medium phase which lends itself well to seedling production and soil building practices. A sandy clay subsoil approximately 12 to 14 inches below the topsoil allows for efficient fertilizer absorption together with limited irrigation. The organic content of the topsoil has been raised to a desirable level, allowing this nursery to plant on a 2-1 cropping rotation. An annual production of 40 million trees could be maintained if necessary.

Ridge Forest Tree Nursery:

During September, 1958, a fourth nursery site was acquired near Trenton, S. C., under a ten-year lease agreement which has a provision that the annual rental payments accrue toward the final purchase price. Purchase can be effected during any period of the ten-year lease or immediately thereafter. Total area includes 110 acres, of which 10 acres are used for a reservoir area. Approximately 75 acres are available for tree seedling production. Two parcels of land (100 acres and 10 acres) are separated by a one-fourth mile right-of-way which is used for the water main from the reservoir to the nursery site proper. The reservoir is supplied by a series of springs and contains approximately 67 acre feet of storage water.

The soil types include both medium Norfolk fine sandy loam and deep phase Norfolk fine sandy loam. The small portion that contains the deep phase Norfolk fine sandy loam will require intensive soil management for several years to build up the organic content to a desirable level.

This year 15,452,000 seedlings were grown and distributed. Since this is the fourth year of production, a total of 140,620,440 seedlings have been produced by the nursery.

All permanent improvements and nursery layout were completed during the 1959-60 fiscal year.

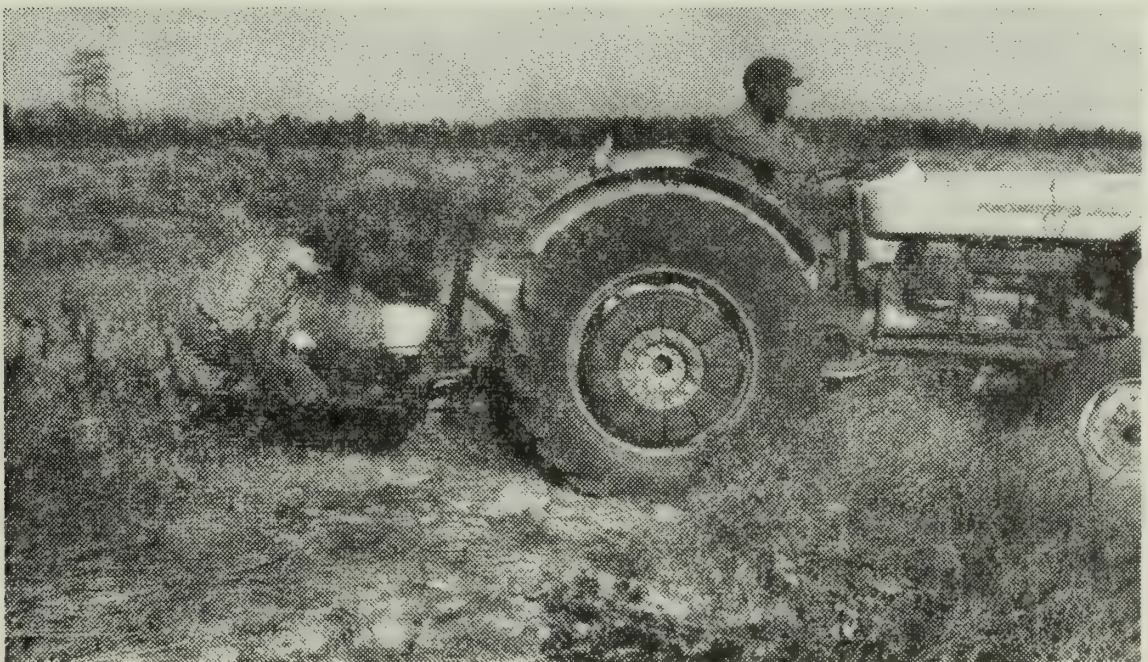
STATE FORESTS

The amount of state forest land remained the same as last year. The state forest locations and acreages are shown below:

Cassatt State Forest	462 acres
Harbison State Forest	2,202 acres
Manchester State Forest	28,830 acres
Sand Hills State Forest	92,000 acres
<hr/>	
Total	123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective continues to be the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops to reduce the competition so that pine will survive and grow. Approximately 23,988 acres of scrub oak land have been cleared and replanted to pine since acquisition by the state. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting



Almost 24,000 acres of scrub oak land has been cleared and replanted to pine on four state forests since they were acquired.

was designed to improve both growth rate and quality of the remaining timber.

The 1960 Legislature passed an act enabling the Commission to use receipts from state forests to speed up the reclamation of scrub oak lands. This program enabled the state to clear approximately 5,000 acres during 1960-61; 5,949 acres in 1961-62; and 5,893 acres in 1962-63. The detailed accomplishments as a result of this program are included in the write-up for individual state forests.

PAYMENTS TO COUNTIES

Twenty-five per cent of the gross receipts of all state forest operations are paid to the counties in lieu of taxes. This year's payment of \$89,802.05 is the largest total ever paid. This year's payment by counties is as follows:

Chesterfield (Sand Hills State Forest)	\$ 50,009.80
Sumter (Manchester State Forest)	35,714.49
Richland (Harbison State Forest)	4,077.76

In the past six years the Forestry Commission has paid a total of \$218,886.16 to counties where state forest lands are located, as follows:

Chesterfield	\$168,548.46
Sumter	123,978.04
Richland	15,264.35
Kershaw	897.36

The forester who was employed to coordinate research and experimental work for the Commission was continued this year. Most of the Commission's research efforts were through cooperative studies with either Clemson College or the Southeastern Forest Experiment Station. Some of the studies established are continued and listed below:

1. Comparison of growth on old fields versus clearings.
2. Furrowing for better survival.
3. Geographic seed source comparisons.
4. Spacing study of eight spacings for slash pine.
5. A test of conifer species suitable for sandhill planting on cleared land and old fields.
6. Thinning study of slash pine.

7. Text of direct seeding slash pine.
8. Control of scrub oak by chemical means.
9. Test of species suitable for Christmas trees.
10. Test of direct seeding longleaf and slash pine.
11. Test of control of scrub oak with 2,4,5-T applied with mist blower.
12. Test of control of scrub oak with various chemicals applied with mist blower.
13. Test of control of scrub oak with Dybar (fenuron) pellets.

Detailed reports of activities on each of the state forests follow:

CASSATT STATE FOREST

The area comprising this forest lies about two and one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a fire tower and dwelling for the towerman was erected. Also, a small amount of pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained annually a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property.

All of this forest is now in production and only a small amount of timber stand improvement work is needed to maintain a good state of production.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires occurred on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the sixteen years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a sub-

stantial amount to the state treasury. This year 395,902 bd. ft. of sawtimber were sold which brought in a total of \$16,311.05.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state on June 28, 1955. Immediate action was taken to establish boundary lines, record title and plat and to get all records of transfer complete. A survey was completed for approximately 80 per cent of the boundary lines during the last four years. Approximately 10 per cent of this forest is still in an unproductive state. It is on this area that the major silvicultural activities are being directed. Most of the old fields except those being farmed have been planted. The clearing of worthless scrub oak lands and planting to pine is proceeding rapidly and will be completed within the next two or three years.

Fire Protection:

Only 1 fire occurred during the year, burning a total of 20 acres. The fire plan for Manchester State Forest and Poinsett State Park was followed during the year. This plan coordinates activities of the Sumter unit fire control organization, personnel of the Manchester State Forest, Poinsett State Park and private landowners in the area in the prevention, pre-suppression and suppression of forest fires. The fire record since 1947 has been excellent for Manchester State Forest.

Fish and Wildlife:

Hunting and fishing are handled by a cooperative agreement with the Sumter County Game and Fish Association, which issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed. State forest personnel plant wildlife food strips and patches with the cost being paid by the Sumter County Game and Fish Association. Peas were planted on 300 acres for deer food and brown top millet was planted on 65 acres as dove and quail food.

Agriculture:

Twenty-five tenants rented 770 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest. Others assist when needed in the prevention and suppression of forest fires.

In addition, 175 acres of newly-cleared scrub oak land were rented for one season to watermelon growers.

Tree Planting:

A total of 1,100,000 trees was planted on the forest during the year, consisting of 700,000 slash and 400,000 longleaf seedlings.

Forest Products Sold and Other Receipts:

Sawtimber—2,488,940 bd. ft.	\$ 90,375.87
Pulpwood and Posts—5,713 cords	45,907.80
Rentals, Leases & Misc.	6,574.30
	<hr/>
Total Receipts	\$142,857.97

Silvicultural Practices:

With the aid of funds made available by the 1960 Legislature the major job of reclaiming scrub oak lands proceeded on schedule. Eleven hundred and forty-five acres were cleared and plowed; 175 acres of this were rented to watermelon growers. The total amount that has now been cleared of scrub oak and planted to pine on this forest is 5,893 acres. Fifteen acres were treated with mist blower (2,4,5-T) to control scrub oak.

Monthly checks were made for insect and disease damage. Treatment of slash pine stumps left in thinning operations with creosote as a control measure in preventing the spread of Fomes root rot was discontinued. Research in cooperation with the Southeastern Forest Experiment Station is being continued.

Maintenance and Repair:

The equipment shed was painted and a barn was built at headquarters. Minor repairs were made on four tenant houses. Extensive repairs were made on one tenant house. Major repairs were made on the D-7 and D-4. The TD-9 was completely overhauled. Telephone lines, roads, truck trails and bridges were repaired as necessary.

Demonstrations and Meetings:

The Burnt Gin group camp was used by consulting foresters for their annual training meeting. A forest management, fire control, and nursery demonstration was given on the forest to approximately 400 4-H boys and girls. A forestry camp was held at Mill Creek for negro boys.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, damage will be confined to a few hundred acres. The lease was to expire on July 30, 1962, but it was renewed for one year and has been again renewed for another year. The State Forestry Commission is being paid \$3,074 per year for this lease.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a game preserve, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the Federal Government on a 95-year lease.

Before the area was acquired by the Government, it was heavily cut over, badly burned and generally abused. As a result, major activities for the present and for several years to come consist of tree planting, adequate fire protection, and other practices aimed at building up the productivity of the land and increasing the forest stand. Almost one-fifth of the forest remains in scrub oak. The reclamation of this scrub oak land is the major silvicultural objective at the present.

Tree Planting:

Most areas were machine planted; however, some hand planting was necessary in rough cleared areas and on experimental plots. Two million and fifty-one thousand slash pine and 2,000,000 longleaf pine were planted in clearings. Most of this longleaf was planted on the Fish and Wildlife Refuge portion of the property. The total planted on the forest during 1962-63 was

4,051,000 seedlings. In addition 28 acres were direct seeded with longleaf pine and slash pine seed.

The total planted on the forest since its establishment amounts to 23,617,352 seedlings. Approximately 21,075 acres have been successfully re-established to pine.

Forest receipts are listed below:

Forest products	\$186,855.94
Watermelon land rentals	12,611.25
Other agricultural lands and miscellaneous receipts	572.00
Totals	\$200,039.19

Fire Protection:

During the year 25 fires burned 1,522.9 acres. Twelve of these fires were incendiary. The fire plan which was developed for the properties in the S. C. State Commission of Forestry, including Sand Hills State Forest and Cheraw State Park, was continued in use during the year. This plan coordinated the activities of the Chesterfield unit fire control organization, personnel of the Sand Hills State Forest, Cheraw State Park, U. S. Fish and Wildlife Service and private landowners adjoining this area in the prevention, pre-suppression and suppression of forest fires.

Recreation:

The Sugar Loaf Mountain Recreation area for white people continued to receive heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake fireplace, a flowing well, parking areas, and latrines provided. The 15 Boy Scout troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing but no swimming is allowed.

The State Park Division continued improvement work on Campbell's Lake Negro State Park. This area received heavy use during the year.

Fish and Wildlife:

Dove hunting only was allowed on the state forest portion of the Sand Hills State Forest. An effort is being made to build

up wildlife stocking in doves, quail, deer, turkey and other native game, and as soon as it appears that sufficient populations of any of these species are available, organized hunting will be allowed on the state forest portion of the property. Rye was planted on 120 acres and brown top millet on 54 acres.

Five hundred sixty-three hunters participated in 9 dove hunts. This was the second year that hunting has been permitted on the forest.

Fishing is allowed in Section's Pond and Sugar Loaf Mountain Lake. Campbell's Lake is open to fishing exclusively for Negroes.

Agricultural Lands:

Several tenants rent and farm agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers have been abandoned and have been planted to pine trees. More of this land will be returned to trees. Twenty-three watermelon planters rented 1,687 acres.

Silvicultural Practices:

Under the program authorized by the Legislature to clear scrub oak areas and plant them to pine 5,180 acres were cleared. Not all of this cleared land was planted, since a large part was rented to watermelon growers for one season. The clearing technique is the same as has been used in the past. A root rake is used to push the aerial portions of the scrub oak into windrows which is then burned; then the area is plowed with heavy discs. The total that has been cleared of scrub oak on this forest is now 18,738 acres. It is expected that approximately 5,000 acres will be cleared during 1963-64.

As a hazard reduction measure, 68 acres were control burned. Bad fire weather prevented more of this work from being done. Timber stand improvement which released young pines from overtopping hardwoods was done on 425 acres.

A mist blower was used to apply 2,4,5-T to 240 acres for the control of scrub oak. A tree injector was used to apply 2,4,5-T to 36 acres. Fenuron was applied to 106 acres with a helicopter to control scrub oak.

Maintenance and Repair:

Some repair work was done to Sugar Loaf Mountain recreation area. The general condition of headquarters and director's residence is good and only routine repairs were made during the year. A considerable effort was necessary to maintain truck trails, bridges and firebreaks. Some major overhaul on heavy tractors was necessary.

Boundary Surveying:

No official boundary surveying was accomplished during the year. There were one or two instances where some dispute occurred as to location of property boundaries; however, most of these were resolved. There is need for boundary survey and marking on a large part of the area.

FOREST FIRE PROTECTION

INTRODUCTION

The Fire Control Branch of the S. C. State Commission of Forestry provides intensive forest fire protection to all private timberland owners in the state. Cooperative fire protection assistance furnished each landowner is based on the theory that the landowner is primarily responsible for the prevention and control of fires on his property, and the Commission of Forestry cooperates with the individual whenever and wherever possible.

The state is divided into seven districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district. District headquarters are located at Camden, Florence, Kingstree, Newberry, Orangeburg, Spartanburg, and Walterboro. The districts are sub-divided into county units—all of which have fire control organizations and a limited amount of suppression equipment, enabling them to work directly with private landowners in the prevention and control of fires on private holdings. Many landowners throughout the state maintain their own fire suppression hand tools and mechanized equipment with sufficient personnel to adequately handle wild fires on their property.

The total state and private forest area in South Carolina comprises some 11,175,000 acres. In addition to the above total, the U. S. Forest Service protects 587,221 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

County Units:

Each county unit organization consists of a unit ranger, wardens, lookout towermen, and tractor operators. The number of wardens, towermen, and tractor operators in each county varies according to the size and forest acreage of the county and in some cases with particular problems which may exist. The total county unit personnel in South Carolina consists of 46 rangers, 134 wardens, 69 tractor operators, and 138 lookout towermen.

County Forestry Boards:

The State Forest Fire Protection Act of 1945 provides for a county forestry board consisting of five members to be ap-

pointed by the Commission of Forestry upon the recommendation of the majority of the County Legislative Delegation. The individuals who serve on the forestry boards in each county are appointed for a five-year term. An annual meeting is held each year to discuss and review forest fire protection activities within the county. All board members are kept informed of the various activities of the Commission of Forestry and are contacted periodically in connection with the work program. Many of the accomplishments in forest fire control are attributed directly to the efforts and support of the individual board members throughout the state.

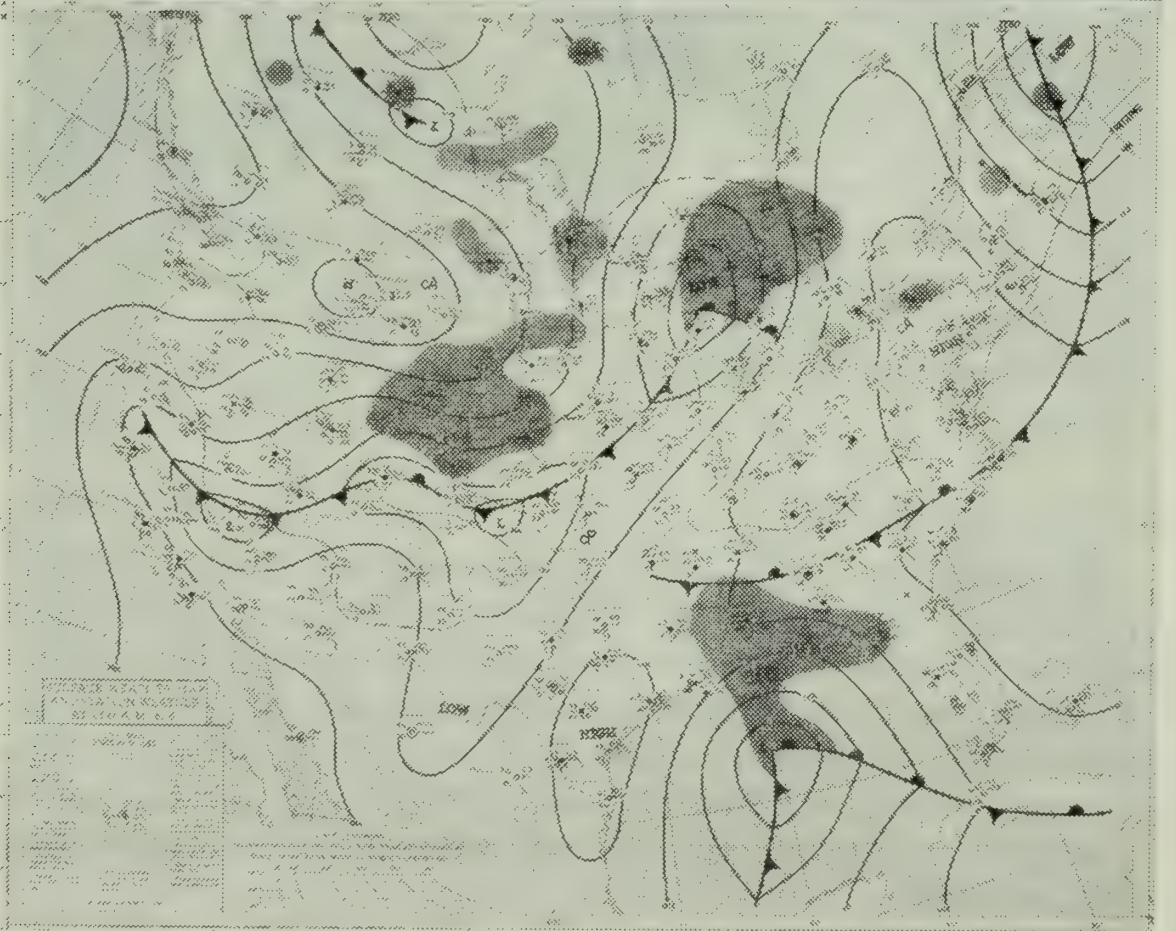
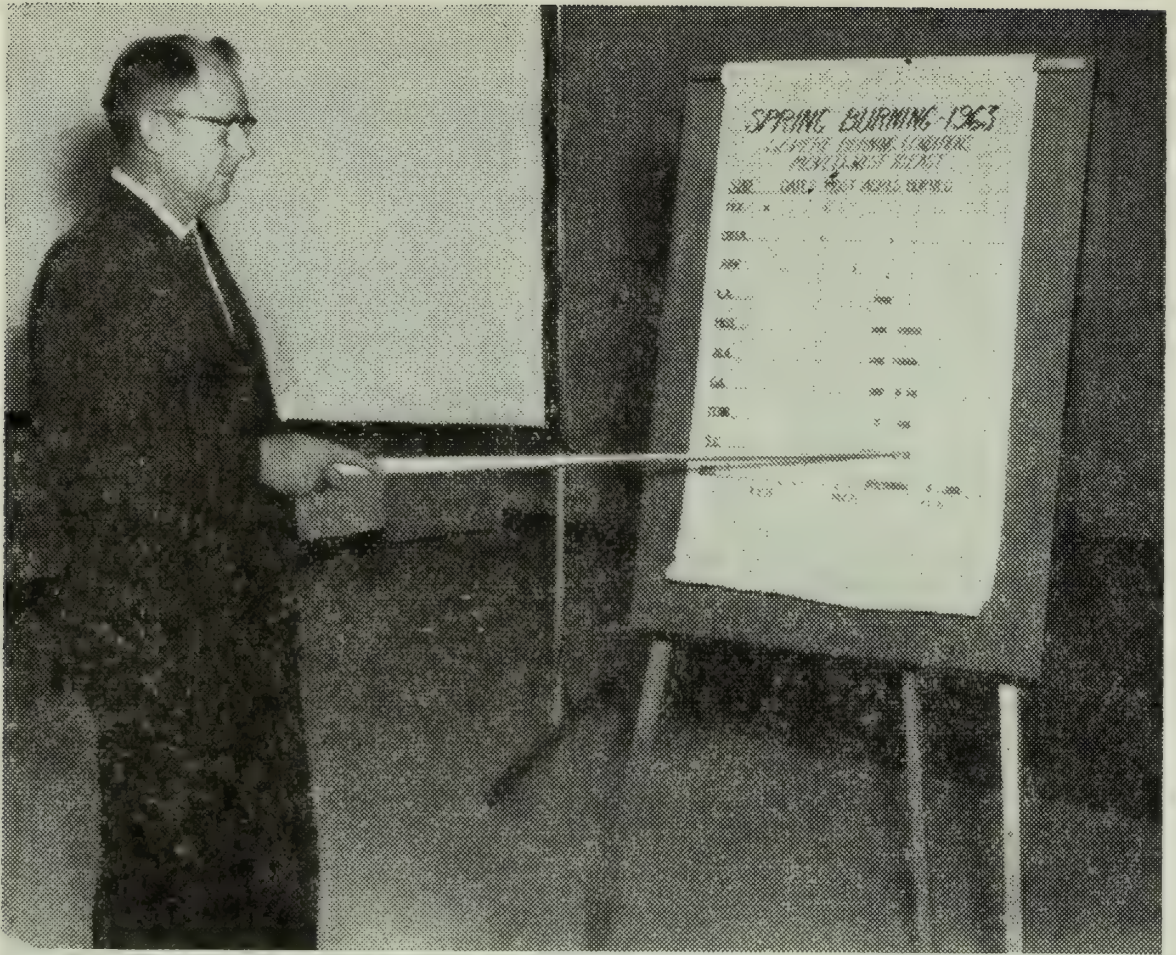
State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards, organized in 1952, is composed of one delegate from each county board elected by the membership of the board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities, including forest fire control, forest management, reforestation, and information and education. The committee meets annually to discuss the proposed forestry program for the coming fiscal year and also considers the budget request which is submitted to the State Legislature. Individual committee members are responsible for familiarizing themselves with local forestry conditions and activities within their counties and making recommendations to the Commission of Forestry in an endeavor to further the overall forestry program in South Carolina.

State Forests and Parks:

Approximately 172,127 acres are contained in the 30 state park areas and 4 state forests of South Carolina. The individual park superintendents and state forest directors are responsible for protection from wild fires within their own boundaries on a cooperative basis with the Branch of Forest Fire Control. Fire plans, including recommendations for adequate protection of these state-owned areas, have been prepared and furnished each superintendent.

During the 1962-63 fiscal year, two medium fire suppression units were purchased for use on Manchester State Forest in Sumter County and Sand Hills State Forest in Chesterfield County.



Above, John Purvis, Meteorologist in Charge, Weather Bureau, Columbia Airport Station, aids in training Commission personnel in effect of weather on forest fire behavior.

Below, a typical daily weather map showing progress of weather "fronts" which determine important controlling factors in fire behavior such as wind velocity and direction, temperature, relative humidity and precipitation.

Cooperative Agreements with U. S. Forest Service:

The Commission of Forestry and the U. S. Forest Service maintain a formal agreement to assist one another with the detection and suppression of fires which occur along the immediate vicinity of the national forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

Constant training is required to get the many and varied activities of the Fire Control Branch accomplished efficiently and economically. Training is designed to fit the individual and his job responsibility, with special emphasis being given to local and on-the-job training. Special group training is carried on periodically including such subjects as law enforcement, fire behavior, large fire organization, damage appraisal, and civil defense.

Three one-day law enforcement schools at Florence, Newberry, and Walterboro were conducted for all fire control personnel. Two Fire Weather and Fire Behavior schools were conducted for central and district office fire control personnel and county rangers.

Inspections:

Complete unit inspections are conducted in each county in an endeavor to discover deficiencies in the fire control organization. These inspections cover all phases of the fire control activities in a county unit and are normally conducted at least two years in all counties.

The fire control fleet of mechanical equipment requires constant attention and special emphasis is placed on preventive maintenance in order to keep all equipment operating efficiently and with a minimum of operating costs. Periodic motor vehicle inspections are made by the traveling mechanics and district heavy suppression unit operating mechanics in an endeavor to carry out the fire control preventive maintenance program.

Special inspections were conducted in the twelve "hot" counties of the state where one-half of the total number of fires and two-thirds of the acreage burned is experienced.

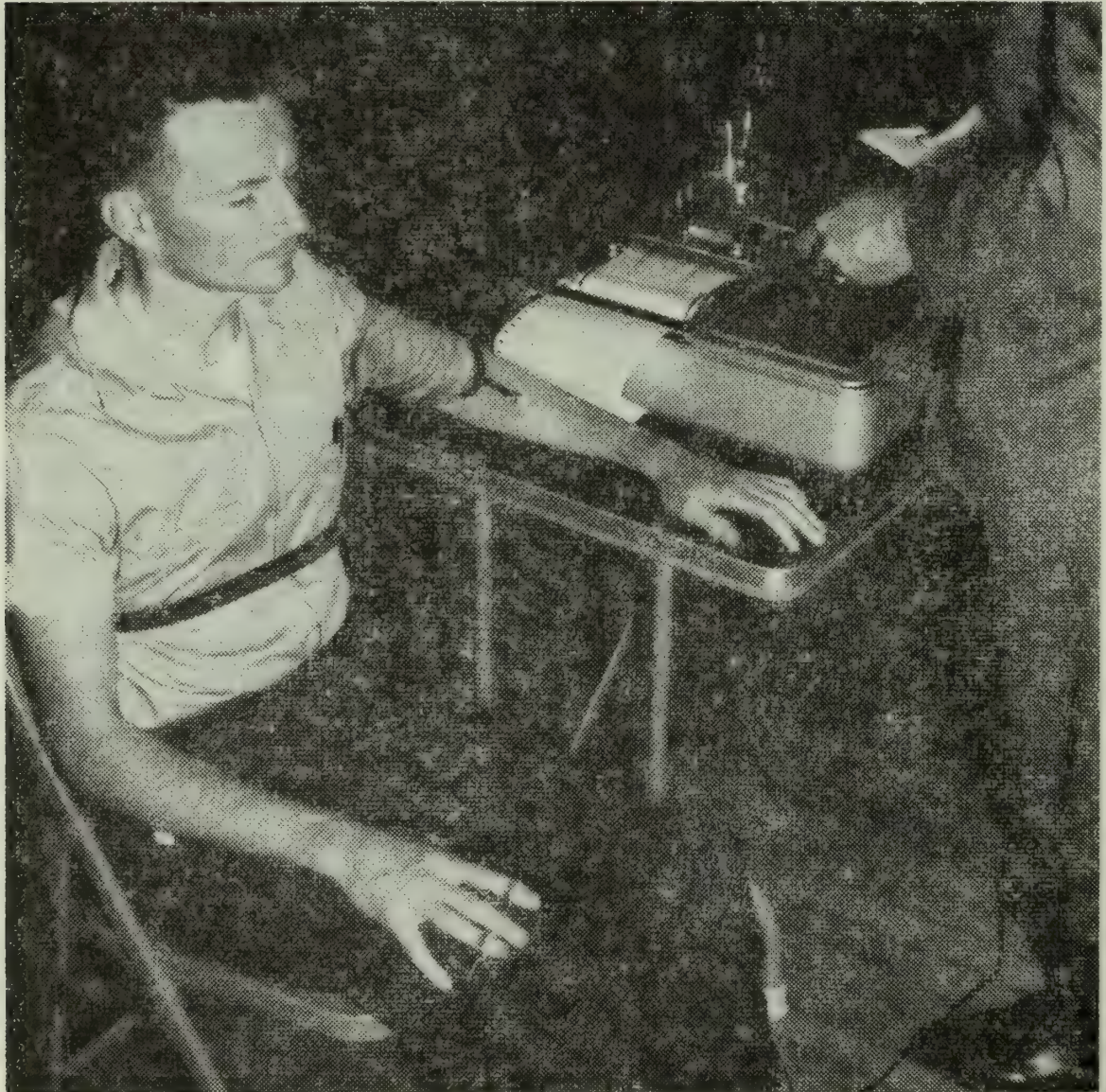
Fire Control Progress Checks:

Periodic fire control progress checks are conducted in each district of the state by the central fire control staff to determine

the efficiency and effectiveness of the entire fire protection program. All phases of the work are analyzed and reviewed with the district office staff in an endeavor to maintain a high degree of performance in this activity.

Law Enforcement:

The Forestry Commission continued to train its law enforcement personnel and further intensify the law enforcement program during the year. Three one-day law enforcement schools were held at Newberry, Florence, and Walterboro. Instruction at these schools was furnished by the Attorney General's office and the State Law Enforcement Division. Personnel from the Fire Control Branch also attended a week-long Arson Seminar held in April at Myrtle Beach.



Use of the polygraph is demonstrated as one of the interrogation tools available in the SLED and Commission of Forestry's forest fire law enforcement program.

Seven additional fire control personnel were commissioned as forest fire investigators during the year, bringing the total to 56 people who are commissioned by the Governor to enforce forest fire laws.

There were a total of 437 prosecutions and 424 convictions obtained for violations of the various forest fire laws for the fiscal year. Of this number, 69 of the prosecutions and 67 of the convictions were for the violation of the burning permit or notification laws; 356 prosecutions and 345 convictions were for violations of the careless and negligent law; and 12 of the prosecutions and 12 convictions were for the violation of the willful and malicious law.

The main causes of forest fires were incendiary or deliberate burning, 1,655 fires; careless brush and debris burning, 1,459 fires; and smokers, 1,372 fires. These three causes accounted for 4,486 of the total 5,441 fires that burned during the year.

One new burning notification law was enacted in Lee County during the year. No new county permit laws were enacted. Counties with the permit law statutes are Chesterfield, Aiken, Orangeburg, Georgetown, Charleston, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Counties with notification laws include Beaufort, Colleton, Hampton, Jasper and Lee.

Fire Plans:

Each county unit organization is provided with a fire control plan which guides and controls fire suppression activities within the unit. The plans are kept current and revised to conform with changing conditions and latest operating procedures.

Plans similar to the fire control plans used in county units are prepared for landowners throughout the state who desire to maintain adequate fire protection on their timberland ownerships.

Legislative Forestry Study Committee:

The 1955 session of the General Assembly provided for the appointment of a Legislative Forestry Study Committee which has been continued through the years. This Committee, which originally was designed to study forest fire conditions in the state, has been expanded to cover the entire field of forestry. Each year the Committee schedules a series of meetings and hearings and

formulates many recommendations which are consolidated in an annual report to the General Assembly. The General Assembly has extended the Forestry Study Committee for the fiscal year 1963-64.

Southern States Forest Fire Control Conference:

The twenty-fourth Southern States Forest Fire Control Conference was held in Biloxi, Mississippi, on May 21, 22, and 23, 1963. These annual meetings are designed to allow exchange of fire control ideas between states and to promote efficiency in fire protection activities.

Southeastern States Forest Fire Compact Commission:

The ten southeastern states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia make up the Southeastern States Forest Fire Compact Commission.

The membership of this Commission from each state is comprised of a Compact Administrator (the State Forester) and a four-member advisory committee. The South Carolina membership includes Senator L. Marion Gressette of Calhoun County, Representative Charles G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County, and R. R. Rigby of Columbia.

The governing body of the Compact Commission is a five-man executive committee headed by a chairman. The chairman is selected by the Commission at its annual meeting.

Civil Defense:

The Commission of Forestry cooperates with State Civil Defense in relaying messages to and from State Civil Defense Headquarters and local Civil Defense Chairmen. This cooperative assistance is rendered during any emergency or disaster which may hit the state, as well as participating in Civil Defense alerts which may be scheduled from time to time. All messages are relayed over the Commission's two-way radio network by members of the central fire control office, district offices, and county radio facilities.

IMPROVEMENTS, TOOLS AND EQUIPMENT

Lookout Towers:

There are 138 forest fire lookout towers in South Carolina which are operated by the S. C. State Forestry Commission. The U. S. Forest Service operates 19 lookout towers on the Sumter and Francis Marion National Forests in addition to the state-operated towers. State and federal towermen cooperate with each other in spotting and locating fires which occur within their range of visibility.

Tower Unit Building:

During the 1962-63 fiscal year, no major improvements were installed at the tower sites. Routine maintenance jobs were carried out at all towers during the year.

ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

138 Lookout Tower Units	\$ 2,947,503
46 Fire Danger Measurement Stations	3,450
250 Miles Telephone Line	75,000
Central Radio Shop and Map Laboratory	25,000
Central Repair Shop and Warehouse System	286,480
6 District Repair Shops	30,000

Radio:

4 Remote Control Base Stations,		
2 frequency-250 watt	@ \$3,000	\$12,000
1 Remote Control Base Station,		
2 frequency-100 watt	@ 1,600	1,600
12 Remote Control Base Stations,		
2 frequency-60 watt	@ 1,400	16,800
1 Mobile Relay Station,		
60 watt	@ 1,538	1,538
117 Local Control Base Stations,		
2 frequency-10, 30, 60 watt....	@ 560	65,520
63 Local Control Base Stations,		
1 frequency-10, 30, 60 watt....	@ 530	33,390

150 Mobile Units,		
1 frequency-10, 25, 30 watt...@	520	78,000
168 Mobile Units,		
2 frequency-10, 25, 30 watt...@	550	92,400
10 Mobile Units (Transistorized), (Mobile Relay), 80 watt@	800	8,000
18 Mobile Units (Transistorized),		
2 frequency-80 watt@	650	11,700
6 Portable Units (Transistor- ized), High Band—1 frequen- cy-5 watt@	742	4,452
2 Portable Units (Low Band)		
1 frequency-8 watt@	550	1,100
116 Auxiliary Receivers@	200	23,200
8 Radio Towers		20,400
7 Antennas—(Gain)@	195	1,365
8 Antennas—(Low Band)@	65	520

371,985

TOTAL\$ 3,739,418

Equipment:

During the fiscal year, 3 additional fire suppression units were purchased and assigned to Berkeley, Chesterfield and Horry Counties. One additional tractor operator was employed in Horry County; other units were assigned to wardens. Three ranger pickup trucks were purchased as replacements for old, worn-out units. Nine medium tractor suppression units were replaced with new crawler-type tractors, and 10 new transport trucks were replaced during the year.

**INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT
AND ESTIMATED REPLACEMENT VALUE
June 30, 1963**

2,391 Back Pack Pumps	\$ 42,400
5,014 Fire Rakes	17,220
2,669 Fire Swatters	10,656
393 Backfire Torches	8,040
12 Heavy Suppression Tractor-Plow Units w/Transports	272,000
3 Heavy Dozers	80,000
1 Medium Suppression Tractor-Plow Unit w/Transport	20,800
73 Light Tractor-Plow Units w/Transports	552,950
3 Heavy Lowboy Truck-Transports	10,000
45 Ranger Pickup Trucks	78,750
1 1/4-ton Jeep	2,250
7 Sedan Delivery Trucks	14,000
2 2-ton Stakebody Trucks	7,650
16 1/2-ton Pickup Trucks	28,000
1 Mobile Field Headquarters Unit	3,200
1 Field Kitchen w/Power Supply Trailer & Water Truck	14,000
1 Supply Van	2,500
TOTAL	\$ 1,136,290

Equipment Maintenance Shop:

The Fire Control Branch operates a Central Repair Shop at Sumter where heavy and specialized repairs are made to all fire control equipment. Three traveling mechanics, headquartering at the Sumter Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the vehicle operator and the district mechanic, make such repairs as they are equipped to handle. During the year, the traveling mechanics made 927 complete field inspections of equipment and conducted 1,114 field repair jobs. Installation of fire-fighting equipment was made on 11 new trucks.

The Central Shop personnel at Sumter made many repairs to automotive equipment owned by the Commission and made many items necessary for field use. Some of the work handled by the mechanical force is listed below.



Above, trees give way to clearings on Harbison Forest as preparations are made for the construction of the State Commission of Forestry's new administration building and central shop-warehouse system.

Below, a trailer kitchen is used to prepare meals for Commission personnel selected from all over the state who are helping with the construction of the new Forestry Center.

Major repairs were made to 68 light tractors, 15 heavy tractors, 35 light trucks, 54 heavy trucks, 5 light plows, 1 heavy plow, 2 light trailers, and 6 heavy trailers. Minor repairs were made to 6 light tractors, 11 light trucks, and 2 heavy trucks.

In addition to repair work, many items were adapted to field use or manufactured outright at the Central Shop. Work done included modifying or building equipment bodies, making booster tanks, radio boxes, and equipment racks. Repairing and putting into service surplus equipment is also done at the Central Repair Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. The facilities are used for warehousing certain materials and supplies necessary for the efficient operation of each of the forestry districts and by the mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district. The traveling mechanics who operate from the Central Repair Shop at Sumter also use the shops in assisting the local mechanics to more effectively keep all motorized equipment in good operating condition at all times and to make any necessary repairs which may be needed locally.

Columbia Radio Shop:

Since 1958, the Forestry Commission has maintained a Central Radio Communications Maintenance and Repair Shop at 241 Catawba Avenue in Columbia. All activities, including installations, maintenance, and repair of communications equipment by the radio technicians assigned to the outlying district repair shops, are administered from this central headquarters.

Fire Control Maps:

During the 1958-59 fiscal year, a new map laboratory, complete with drafting room and map-making facilities, was set up in one section of the Central Radio Repair Shop. All maps required in fire protection activities in the state are manufactured at this laboratory facility.

Radio:

In accordance with a plan to reduce radio interference, all radio equipment in Kingstree and Orangeburg Districts was converted to dual channel operation.

The Florence District Radio Technician was moved to Florence and is operating from a temporary shop until the new district shop is constructed.

A few transistorized mobile units were added to the system and have proven very satisfactory in performance.

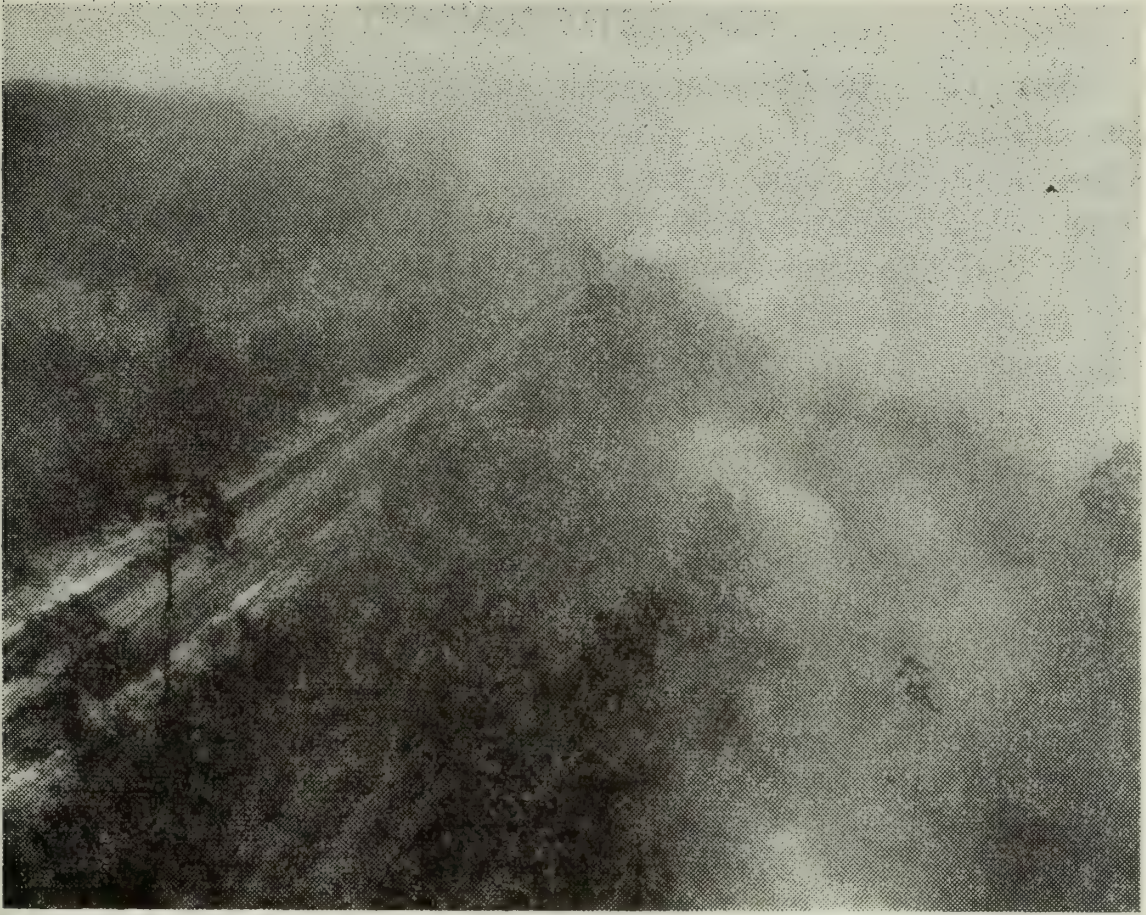
Maintenance and installations were performed in a normal routine manner during the year.

Use of Aircraft in Fire Control:

Radio-equipped planes are used on a contract basis when necessary to supplement the lookout towers. During periods of low visibility, towers cannot adequately cover their area of responsibility and, without the use of airplanes, many fires would occur and burn for a long period of time undetected before they are discovered and reported to the fire control organization. During the hazardous 1962-63 fire season, chartered aircraft were used in detecting and checking fires during periods of high occurrence, directing ground suppression forces on large and troublesome fires, and assisting with law enforcement efforts in incendiary problem areas.

Fire Danger Measurement:

Fire danger measurement stations are located in each county of the state. Readings are taken at these stations twice daily and the information disseminated to all fire control personnel to keep them informed on potential conditions leading to high fire occurrence and difficulty of control. Fire control personnel use this fire danger information in planning daily work activities and degree of standby readiness. Class fire days are rated from 1 to 5, with 1 the lowest and 5 representing the highest degree of fire danger. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the 5 major ratings: 187 Class No. 1 days; 106 Class No. 2 days; 53 Class No. 3 days; 16 Class No. 4 days; and 3 Class No. 5 days.



A lookout tower is rendered useless in detecting new smokes when the weather condition is very hazy or smoke from a nearby fire reduces visibility to a few hundred yards.

Legal Fires:

Legal fires are all forest fires which are previously authorized by the landowner and started by him or his authorized agent and which burn entirely upon his land. A total of 2,895 fires which burned 180,795 acres were conducted by individual landowners during the year and recorded by county unit personnel. 721 fires burning some 64,279 acres were conducted for hazard reduction purposes; 176 fires which burned 79,930 acres were handled on hunting preserves for the purpose of improving woodland conditions for hunting and the management of game. Burnings conducted to rid timber areas of accumulated debris and rubbish accounted for 1,703 fires which burned 18,001 acres. Burning of timberland areas for grazing purposes accounted for 239 fires which burned 9,190 acres. 56 fires burning 9,595 acres were conducted for miscellaneous purposes such as the destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

South Carolina experienced during the 1962-63 fiscal year its worst forest fire season since 1954-55. A total of 5,441 fires burned 68,315.1 acres of timberland during the past year. The 1962-63 season represented 1,773 more fires than during the previous year. The acreage burned during the past year represents .61 percent of the 11,175,000 acres under protection in the state. The average area burned per fire was 12.5 acres.

March and April were by far the worst months for fire occurrence and acreage burned. During the last half of March and the first three weeks of April, 2,591 fires burned 45,665 acres of woodland. This is approximately half of the fires which occurred and three-fourths of the acreage which burned during 1962-63. Several dry cold weather fronts were experienced during March and April, resulting in winds of high velocity and a deficit in rainfall during both these months. Rainfall which occurred during March and April fell on a few days and was not well distributed. Sunshine during this fire season was much above normal.

During the hazardous months of March and April, personnel and equipment were transferred from the Piedmont and Sand Hills to the Coastal Plain area to assist with difficult fire situations.

Incendiarism was the leading cause of wild fires, followed by debris burning and smokers. The organization recorded 1,665 incendiary fires, 1,459 debris burning fires, and 1,372 smoker fires during the 1962-63 year. Incendiary fires accounted for 30.5% of all fires in the state, debris burning caused 26.8%, and smokers started 25.2% of the total fires.

Counties experiencing heavy fire occurrence and acreage lost were Berkeley with 323 fires and 5,343.2 acres burned; Chesterfield, 78 fires and 2,035.3 acres; Clarendon, 265 fires, 3,900.3 acres; Colleton, 227 fires, 3,598.0 acres; Dorchester, 149 fires, 3,447.0 acres; Georgetown, 155 fires, 3,760.4 acres; Horry, 255 fires, 4,349.6 acres; Orangeburg, 325 fires, 4,399.5 acres; and Williamsburg, 432 fires, 10,048.5 acres.

Counties with light fire occurrence included Abbeville with 30 fires and 162.8 acres burned; Calhoun, 15 fires, 111.9 acres; Cherokee, 28 fires, 292.8 acres; Edgefield, 43 fires, 244.8 acres; Fairfield, 34 fires, 249.2 acres; Greenwood, 47 fires, 135.5 acres;

McCormick, 30 fires, 164.1 acres; Marion, 68 fires, 216.6 acres; and Saluda, 25 fires, 160.8 acres.

Recorded precipitation in South Carolina during fiscal year 1962-63 was approximately one and one-quarter inches less than the previous fiscal year. The 50.03 inches of rainfall which was recorded at the 46 fire danger measurement stations in the state represent a departure from normal of 3.47 inches above the long-time average. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

Month	Amount Rainfall (Inches)	Departure from Normal (Inches)
July, 1962	4.26	— 1.50
August, 1962	4.49	— .81
September, 1962	5.38	+ .99
October, 1962	2.48	— .24
November, 1962	4.44	+ 1.90
December, 1962	2.73	— .76
January, 1963	5.23	+ 1.93
February, 1963	3.85	+ .13
March, 1963	3.99	— .28
April, 1963	3.31	— .29
May, 1963	3.90	+ .52
June, 1963	5.97	+ 1.88
TOTAL	50.03	+ 3.47

A five-year summary of precipitation by fiscal years is shown below:

Year	Amount Rainfall (Inches)	Departure from Normal(Inches)
1958-59	47.03	— 1.80
1959-60	64.29	+15.46
1960-61	55.00	+ 6.17
1961-62	51.27	+ 2.44
1962-63	50.03	+ 3.47
Average	53.52	

APPENDIX
FINANCIAL STATEMENT
SOUTH CAROLINA STATE COMMISSION OF FORESTRY
July 1, 1962-June 30, 1963

Receipts

Division of Forestry:

Balance from 1961-62, Forestry Commission-Specials	\$ 46,611.42	
Balance from 1961-62, Construction of Forestry Center	56,368.00	
State Appropriation—Operating	1,935,473.64	
Forestry Commission—Specials, CM Law Sec. 2	392,800.00	
Forestry Commission—Specials, CM Law Sec. 4	4,200.00	
Forestry Commission—Specials, Coop. Forest Management	70,608.05	
Forestry Commission—Specials, Soil Bank—Title IV Program	54,800.00	
Forestry Commission—Specials, A.S.C.S.	23,045.08	
Forestry Commission—Specials, Rural Area Development	3,177.00	
Forestry Commission—Specials, Watersheds Counties and Timber Firms	25,449.37	
State Forests (S.O.E.P.)	8,682.75	
Construction of Forestry Center (Loan & Property Sale)	359,208.21	
Nurseries	80,870.00	
Timber Marking	205,508.71	
Miscellaneous	11,697.02	
	12.50	
Total Receipts—Forestry		\$ 3,278,511.75
Less Receipts Deposited to Cr. of State Revenue Account		233,490.77
Total Receipts Available for Expenditure		3,045,020.98
Total Expenditures		2,913,136.63
Balance—Division of Forestry		131,884.35*

Division of State Parks:

Balance from 1961-62, Forest & Parks—Beach Village	\$ 2,904.45	
Balance from 1961-62, Forest & Parks—Croft Timber Sale	32,912.10	
Balance from 1961-62, Parks Improvements	35,038.76	
Balance from 1961-62, Fort Dorchester—Special	4,828.54	
Balance from 1961-62, Huntington Beach—Special	17,165.37	
Balance from 1961--62, Myrtle Beach Fishing Pier	2,657.22	
Balance from 1961-62, Myrtle Beach Swimming Pool	736.94	
State Appropriation—Operating	410,746.00	
State Appropriation—Historical Areas	17,761.00	
Forests & Parks Fund—Hunting Island Deposits	3,631.48	
Forests & Parks Fund—Santee Boat Landing	1,552.82	
Forests & Parks Fund—Croft Timber Sale	14,240.53	
Myrtle Beach Fishing Pier	40,838.52	
Myrtle Beach Swimming Pool	8,230.80	

Cabin Rentals	26,352.93
Refreshment Stands & Concessions	1,707.60
Bathhouse & Swimming	37,110.10
Boat Rentals	2,524.50
Picnic Shelters—Recreation Bldgs.	3,503.02
Group Camps	17,996.14
Day Camp & Trailer Fees	34,712.35
Miscellaneous; Sales Tax; Timber Sale ..	3,301.09
Sesquicentennial Park—Land Swap	12,000.00

Total Receipts—Parks	\$ 732,452.26
Less Receipts Deposited to Cr. of State Revenue Account	139,207.73

Total Receipts Available for Expenditure	593,244.53
Total Expenditures	498,334.96

Balance—Division of State Parks	94,909.57†
Unexpended Balance of State Appropria- tion Diverted to General Fund .....	.10
	94,909.47

Expenditures

Soil Bank Repayment	\$ 66,544.39
Administrative & Technical	734,235.50
State Forestry Nurseries	334,691.71
State Forests Projects	264,977.58
Fire Protection	1,331,292.14
Construction of Forestry Center	11,531.02
Chesterfield, Richland & Sumter Counties 25% Receipts from State Forests	89,802.05
Payment of loan to State Sinking Fund & Property	80,062.24

Total—Division of Forestry	2,913,136.63
Total—Division of State Parks	498,334.96

GRAND TOTAL—Expenditures	\$ 3,411,471.59
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Recapitulation

Funds Available:

Division of Forestry	\$ 3,045,020.98
Division of State Parks	593,244.53

\$ 3,638,265.51

Expenditures:

Division of Forestry	2,913,136.63
Division of State Parks	498,334.96

3,411,471.59

226,793.92*†

Balance

* Forestry—Forestry Commission, Specials ...	6,177.37
Construction of Forestry Center ...	125,706.98
† Parks —Forests & Parks Fund	37,916.36
Parks Improvements	35,038.76
Myrtle Beach Fishing Pier	3,106.14
Myrtle Beach Swimming Pool	992.94
Fort Dorchester—Special	689.90
Huntington Beach—Special	17,165.37

226,793.82

Unexpended Balance of State Park Appropria- tion Diverted to General Fund10
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TABLE 1 — PROTECTION PERSONNEL
Fiscal Year 1962-63

UNIT	Organized Personnel					Volunteer Personnel	GRAND TOTAL
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	182	187
Aiken	1	4	2	5	12	504	516
Allendale	1	2	1	3	7	97	104
Anderson	1	2	1	3	7	308	315
Bamberg	1	2	1	2	6	415	421
Barnwell	1	2	2	2	7	256	263
Beaufort	1	3	2	4	10	180	190
Berkeley	1	4	2	4	11	556	567
Calhoun	1	2	1	2	6	92	98
Charleston	1	4	3	3	11	349	360
Cherokee	1	1	1	1	4	195	199
Chester	1	3	1	1	6	188	194
Chesterfield	1	3	1	4	9	216	225
Clarendon	1	3	2	3	9	467	476
Colleton	1	4	3	5	13	646	659
Darlington	1	2		3	6	506	512
Dillon	1	2	1	2	6	308	314
Dorchester	1	4	2	3	10	246	256
Edgefield	1	2	1	1	5	202	207
Fairfield	1	4	1	3	9	192	201
Florence	1	4	2	4	11	770	781
Georgetown	1	4	2	4	11	601	612
Greenville	1	3	1	4	9	1,579	1,588
Greenwood	1	2	1	2	6	168	174
Hampton	1	3	1	3	8	230	238
Horry	1	5	3	4	13	1,001	1,014
Jasper	1	3	2	2	8	632	640
Kershaw	1	3	2	6	12	346	358
Lancaster	1	3	1	2	7	410	417
Laurens	1	3	1	2	7	344	351
Lee	1	2	1	3	7	185	192
Lexington	1	3	2	5	11	233	244
McCormick	1	1	1	1	4	154	158
Marion	1	3	2	3	9	544	553
Marlboro	1	3	2	3	9	514	523
Newberry	1	2	1	2	6	442	448
Oconee	1	2	1	3	7	490	497
Orangeburg	1	5	3	5	14	690	704
Pickens	1	3	1	4	9	441	450
Richland	1	5	2	4	12	738	750
Saluda	1	2	1	1	5	162	167
Spartanburg	1	3	1	4	9	500	509
Sumter	1	3	2	3	9	556	565
Union	1	2	1	1	5	317	322
Williamsburg	1	5	2	4	12	2,012	2,024
York	1	2	1	4	8	292	300
TOTALS	46	134	69	138	387	20,456	20,843

TABLE 2 — SUMMARY OF FIRES BY MONTHS
July 1, 1962 — June 30, 1963

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July	71	1.3	391.1	5.5
August	89	1.6	302.4	3.4
September	91	1.6	345.2	3.8
October	182	3.4	670.0	3.7
November	274	5.0	1,589.8	5.8
December	762	14.0	6,996.9	9.2
January	398	7.3	3,475.7	8.7
February	578	10.6	4,372.9	7.6
March	1,641	30.2	29,334.5	17.9
April	950	17.5	16,331.1	17.2
May	288	5.3	2,649.4	9.2
June	117	2.2	1,856.1	15.9
TOTALS.....	5,441	100.0	68,315.1	12.5

TABLE 3 -- SUMMARY OF FIRES BY CAUSES -- FISCAL YEAR 1962-63

UNIT	Lightning		Campfire		Smokers		Debris Burning		Incendiary		Machine Use		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	1	3.2	3	22.9	9	11.2	7	56.3	3	6.2	3	8.8	4	54.2	30	162.8
Aiken	6	23.0	7	34.6	56	257.2	41	577.8	1	1.5	2	10.4	30	146.8	143	1,051.3
Allendale	1	5.5	1	13.0	13	124.6	13	209.9	6	133.9	3	80.5	4	16.9	41	584.3
Anderson	2	1.4	2	1.8	48	254.9	22	100.9	5	16.1	3	2.7	3	19.6	85	397.4
Bamberg	1	1.5	1	3.0	18	95.4	29	222.8	29	775.0	..	..	2	37.0	80	1,134.7
Barnwell	..	..	1	2.4	24	130.9	23	277.2	15	71.1	2	278.0	2	9.8	65	491.4
Beaufort	..	..	1	1.0	20	90.9	16	414.8	12	966.5	2	..	2	20.2	53	1,771.4
Berkeley	..	..	4	85.5	68	530.8	46	917.4	199	3,798.4	3	6.1	3	5.0	323	5,343.2
Calhoun	..	..	..	..	9	55.9	1	21.0	3	27.0	..	..	2	8.0	15	111.9
Charleston	..	..	7	40.2	55	284.1	18	192.8	24	102.8	1	5.6	40	313.7	145	1,039.2
Cherokee	..	..	1	1.2	10	34.5	10	169.0	..	..	2	17.2	5	70.9	28	292.8
Chester	..	..	2	6.0	9	47.4	7	68.1	6	103.2	1	88.1	2	6.6	41	319.4
Chesterfield	6	118.2	5	41.5	11	63.7	16	144.2	21	1,466.1	15	66.0	14	135.6	78	2,035.3
Clarendon	..	..	14	105.0	42	274.6	53	507.8	146	2,766.9	5	..	9	245.5	265	3,900.3
Colleton	1	1.0	8	61.3	48	894.6	60	1,649.9	93	939.0	..	..	17	52.2	227	3,598.0
Darlington	1	8.6	5	37.6	44	209.9	52	383.0	6	24.7	5	13.5	13	23.4	126	700.7
Dillon	..	..	2	14.0	29	123.5	44	216.0	19	182.2	4	23.6	6	19.5	104	578.8
Dorchester	..	..	..	..	74	1,011.0	43	1,347.0	12	945.0	4	11.0	16	133.0	149	3,447.0
Edgefield	2	72.1	3	10.3	16	65.3	15	64.3	..	..	..	..	7	32.8	43	244.8
Fairfield	..	..	..	..	11	100.0	8	52.0	..	..	5	62.3	10	34.9	34	249.2
Florence	1	0.1	9	94.6	50	256.3	113	1,002.8	155	1,235.7	9	91.6	15	57.7	352	2,738.8
Georgetown	3	43.0	..	..	43	554.2	25	543.2	77	2,358.0	6	257.0	1	5.0	155	3,760.4
Greenville	1	0.4	2	2.8	87	541.5	62	278.3	10	7.7	4	4.7	33	163.3	199	998.7
Greenwood	1	0.8	..	..	20	43.3	15	54.3	5	16.6	2	2.8	4	17.7	47	135.5
Hampton	1	13.0	3	13.0	19	66.2	33	338.6	44	396.7	1	5.0	5	6.0	106	838.5
Horry	2	89.0	12	506.7	33	519.9	83	967.7	74	1,854.8	2	26.1	49	385.4	255	4,349.6
Jasper	2	26.5	2	9.8	11	52.4	36	655.1	74	1,161.7	4	137.1	6	134.0	135	2,176.6
Kershaw	1	1.6	5	123.8	15	77.3	22	861.8	2	46.0	10	55.3	21	103.3	76	1,269.1
Lancaster	..	..	2	3.0	19	155.4	26	76.1	6	26.1	3	26.5	3	5.2	59	292.3
Laurens	..	..	..	..	19	622.8	22	93.0	5	13.3	12	133.1	15	96.1	73	958.3
Lee	..	..	5	7.3	25	92.2	14	70.2	16	95.2	..	..	4	12.6	64	277.5
Lexington	2	3.0	2	5.5	19	66.2	25	87.5	..	..	3	3.9	14	24.2	65	190.3
McCormick	3	34.0	..	..	8	25.3	9	22.4	..	..	2	1.4	8	81.0	30	164.1
Marion	..	..	3	2.2	22	64.8	22	66.5	10	55.7	8	19.8	3	7.6	68	216.6
Marlboro	2	63.0	3	10.0	27	188.0	42	199.4	17	16.0	10	6.9	15	31.0	116	514.3

Newberry	1	481.0	3	27.7	7	28.5	9	35.0	1	13.0	6	27.0	11	33.9	38	645.1
Oconee	..	....	..	...	19	69.5	30	83.5	7	95.6	10	77.5	16	74.4	82	400.5
Orangeburg	..	....	6	82.1	64	718.0	73	982.6	175	2,558.8	..	...	7	58.0	325	4,399.5
Pickens	..	....	1	0.3	26	83.8	46	268.6	4	56.3	8	4.6	12	26.9	97	440.5
Richland	1	0.3	6	324.2	62	425.5	31	274.2	48	561.8	6	12.1	29	206.8	183	1,804.9
Saluda	..	....	1	0.9	7	55.7	10	93.3	..	....	..	...	7	10.9	25	160.8
Spartanburg	1	22.0	..	...	27	117.0	28	373.0	..	....	13	182.0	15	58.9	84	752.9
Sumter	..	....	17	135.0	52	366.6	33	498.0	50	1,118.7	..	...	16	78.3	168	2,196.6
Union	..	....	1	4.0	28	87.1	14	44.7	1	4.0	12	237.2	9	13.5	65	390.5
Williamsburg	2	45.0	21	143.4	26	207.1	96	1,617.0	274	7,864.8	1	5.0	12	166.2	432	10,048.5
York	..	....	..	...	23	142.2	16	174.3	..	....	13	263.4	15	160.9	67	740.8
TOTALS	45	1,056.2	171	1,977.6	1,372	10,387.2	1,459	17,353.3	1,655	31,882.1	203	2,254.3	536	3,404.4	5,441	68,315.1

TABLE 4 — SUMMARY OF FIRES BY FIRE CLASS
FISCAL YEAR 1962-63

UNIT	Class A		Class B		Class C		Class D		Class E		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	2	0.3	24	81.8	4	80.7	..	..	..	..	30	161.8
Aiken	18	2.8	111	301.5	13	413.0	..	..	1	334.0	143	1,051.3
Allendale	4	0.6	25	77.6	11	331.1	1	175.0	..	..	41	583.7
Anderson	7	1.5	67	188.5	11	207.4	..	..	..	..	85	397.0
Bamberg	6	1.0	50	196.2	22	538.0	2	399.5	..	..	80	1,135.7
Barnwell	2	0.3	56	195.2	7	295.9	..	..	..	..	65	491.4
Beaufort	1	0.2	37	134.2	11	367.0	2	530.0	2	740.0	53	1,771.2
Berkeley	8	1.6	225	953.6	84	2,850.0	4	810.0	2	728.0	323	5,341.6
Calhoun .....	..	..	11	33.9	4	78.0	..	..	..	..	15	111.9
Charleston	7	1.9	120	441.3	17	464.0	1	132.0	..	..	145	1,038.2
Cherokee	1	0.2	22	105.0	4	75.6	1	112.0	..	..	28	292.8
Chester	2	0.3	29	97.4	10	221.7	..	..	..	..	41	319.4
Chesterfield	11	1.3	44	126.0	20	541.0	..	..	3	1,367.0	78	2,034.0
Clarendon	17	2.6	180	745.7	61	2,189.0	7	963.0	..	..	265	3,900.7
Colleton	46	7.5	130	377.5	44	1,435.0	5	833.0	2	945.0	227	3,590.0
Darlington	15	2.0	95	286.7	15	269.0	1	143.0	..	..	126	707.7
Dillon	27	3.1	64	188.7	13	387.0	..	..	..	..	104	572.7
Dorchester .....	..	..	113	452.0	30	804.0	4	682.0	2	1,509.0	149	3,447.0
Edgefield	7	0.9	31	92.1	5	151.8	..	..	..	..	43	244.9
Fairfield .....	..	..	30	67.2	4	182.0	..	..	..	..	34	249.2
Florence	46	6.0	237	691.8	69	2,041.0	..	..	..	..	352	2,732.8
Georgetown	8	1.2	106	358.2	32	1,083.0	7	1,525.0	2	793.0	155	3,769.2
Greenville	53	7.1	134	362.8	11	353.8	1	275.0	..	..	199	981.6
Greenwood	4	0.8	39	71.9	4	62.8	..	..	..	..	47	115.5
Hampton	11	1.4	75	225.1	19	418.0	1	194.0	..	..	106	835.1
Horry	26	3.5	147	387.1	75	2,203.0	5	716.0	2	1,040.0	255	4,339.1
Jasper	13	1.6	85	387.0	33	1,099.0	3	387.0	1	302.0	135	2,175.0
Kershaw	5	0.5	54	191.6	15	267.0	1	102.0	1	708.0	76	1,290.6
Lancaster	9	1.3	41	124.0	9	167.0	..	..	..	..	59	222.0
Laurens	6	0.9	52	155.4	14	406.0	..	..	1	396.0	73	997.4
Lee	3	0.5	54	158.0	7	119.0	..	..	..	..	64	277.5
Lexington	4	0.6	58	140.7	3	49.0	..	..	..	..	65	199.7
McCormick	5	0.8	21	69.0	4	94.3	..	..	..	..	30	143.3
Marion	9	1.4	54	131.2	5	84.0	..	..	..	..	68	265.2
Marlboro	34	5.2	69	166.1	13	343.0	..	..	..	..	116	544.3
Newberry	3	0.5	30	112.1	4	52.5	..	..	1	480.0	38	652.6
Oconee	10	1.7	65	125.8	7	273.0	..	..	..	..	82	400.8
Orangeburg	1	0.1	197	852.4	125	3,182.0	2	365.0	..	..	325	4,339.4
Pickens	24	3.7	65	176.4	8	260.4	..	..	..	..	97	409.0
Richland	16	2.8	128	405.1	38	1,097.0	1	300.0	..	..	183	1,842.1
Saluda	3	0.5	20	76.3	2	84.0	..	..	..	..	25	160.3
Spartanburg .....	..	..	67	219.3	16	406.6	1	127.0	..	..	84	722.9
Sumter	13	2.0	111	436.6	42	1,148.0	1	234.0	1	376.0	168	2,164.6
Union .....	..	..	62	151.8	2	35.7	1	203.0	..	..	65	200.5
Williamsburg	61	6.9	235	901.6	115	4,022.0	15	2,280.0	6	2,838.0	432	10,663.6
York	2	0.3	49	166.5	15	446.0	1	128.0	..	..	67	740.8
TOTAL.....	550	79.4	3,719	12,385.9	1,077	31,678.3	68	11,615.5	27	12,556.0	5,441	68,555.2

UNIT	July 1962		Aug. 1962		Sept. 1962		Oct. 1962		Nov. 1962		Dec. 1962		Jan. 1963		Feb. 1963		March 1963		April		May 1963		June 1963	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	5	34.1	2	5.2	7	8.3	6	12.4	4	11.5	7	47.3	1	1.5	2	4.2	3	32.7	6	26.3	8	24.6	6	16.0
Aiken	6	9.8	11	30.2	2	8.3	1	0.4	7	38.0	20	33.0	8	22.2	13	65.3	27	220.3	24	571.2	2	24.6	6	0.6
Allendale	9	37.5	2	0.9	2	2.5	1	6.0	5	65.1	2	16.6	2	3.0	6	72.7	12	280.7	7	132.8	8	11.5	2	0.6
Anderson	9	1.5	1	1.5	2	2.5	3	18.0	6	20.3	11	64.0	1	6.5	14	37.0	19	116.7	14	99.1	2	2.7	4	3.6
Bamberg	9	37.5	1	1.5	2	2.5	3	18.0	2	5.1	6	22.5	9	26.0	9	99.0	36	553.0	10	372.4	2	33.0	2	4.2
Barnwell	2	3.2	5	12.0	1	1.0	1	1.0	8	14.8	15	59.1	4	7.9	5	100.9	17	148.5	7	143.8	1	0.2	1	0.2
Beaufort	2	20.5	1	1.5	2	2.5	3	18.0	3	35.0	2	8.4	7	20.2	8	299.2	21	905.0	8	428.1	2	55.0	8	248.5
Berkeley	2	20.5	1	1.5	2	2.5	3	18.0	10	71.5	55	1423.8	38	555.0	26	229.7	124	2001.6	47	723.6	9	70.5	8	248.5
Calhoun	2	20.5	1	1.5	2	2.5	3	18.0	1	3.5	2	12.2	1	1.8	4	48.3	5	36.8	2	9.3	7	42.2	2	13.2
Charleston	2	20.5	1	1.5	2	2.5	3	18.0	9	24.4	21	72.7	21	214.9	14	61.2	39	245.1	32	315.5	1	13.2	1	0.6
Cherokee	2	20.5	1	1.5	2	2.5	3	18.0	2	11.0	5	8.4	1	1.8	6	39.6	6	28.2	8	204.6	3	42.2	1	0.6
Chester	2	20.5	1	1.5	2	2.5	3	18.0	3	5.0	6	17.7	1	4.6	3	33.2	8	65.8	7	130.9	3	13.2	1	0.6
Chesterfield	2	20.5	1	1.5	2	2.5	3	18.0	1	0.1	16	136.7	5	61.4	4	66.0	22	1106.0	19	561.9	1	106.0	9	218.5
Clarendon	2	20.5	1	1.5	2	2.5	3	18.0	14	227.7	32	632.7	31	290.7	35	95.2	93	1901.6	32	386.1	9	106.0	9	218.5
Colleton	2	20.5	1	1.5	2	2.5	3	18.0	8	11.3	27	139.6	11	50.5	22	152.3	94	1997.8	51	684.2	6	7.3	5	549.7
Darlington	2	20.5	1	1.5	2	2.5	3	18.0	12	38.4	16	52.3	11	82.1	4	24.1	24	112.9	27	251.0	9	39.6	6	14.7
Dillon	2	20.5	1	1.5	2	2.5	3	18.0	7	14.3	12	32.7	6	9.3	8	12.5	20	185.9	16	206.7	12	25.6	4	16.7
Dorchester	2	20.5	1	1.5	2	2.5	3	18.0	1	20.0	22	84.0	5	50.0	10	54.0	69	2694.0	19	487.0	14	99.0	5	26.0
Edgefield	2	20.5	1	1.5	2	2.5	3	18.0	2	5.5	9	17.6	2	12.2	3	9.2	7	62.4	4	5.1	4	32.5	4	82.6
Fairfield	2	20.5	1	1.5	2	2.5	3	18.0	2	8.0	1	0.8	4	6.5	3	10.1	6	13.6	11	113.3	3	82.0	6	88.6
Florence	2	20.5	1	1.5	2	2.5	3	18.0	21	145.4	42	324.3	37	256.4	49	201.0	116	1020.4	47	553.2	13	100.4	6	88.6
Georgetown	2	20.5	1	1.5	2	2.5	3	18.0	4	36.3	20	93.3	5	53.1	12	52.0	64	1667.0	30	1655.8	12	129.7	2	3.0
Greenville	2	20.5	1	1.5	2	2.5	3	18.0	17	48.4	36	78.8	5	15.5	36	86.1	27	179.6	48	515.1	12	41.5	1	1.5
Greenwood	2	20.5	1	1.5	2	2.5	3	18.0	2	1.8	14	47.8	1	1.0	4	7.6	4	16.9	7	28.5	5	20.5	3	29.0
Hampton	2	20.5	1	1.5	2	2.5	3	18.0	3	6.3	5	13.0	11	78.0	14	53.8	39	478.7	23	145.3	8	34.4	3	29.0
Horry	2	20.5	1	1.5	2	2.5	3	18.0	8	43.3	25	148.7	17	150.1	8	72.7	96	2087.3	48	1091.0	35	622.6	2	2.5
Jasper	2	20.5	1	1.5	2	2.5	3	18.0	1	9.3	16	434.1	14	169.4	22	333.1	58	977.3	17	200.3	5	26.6	2	26.5
Kershaw	2	20.5	1	1.5	2	2.5	3	18.0	6	25.6	6	12.3	4	56.0	8	136.0	16	157.8	18	797.0	6	43.2	1	17.0
Lancaster	2	20.5	1	1.5	2	2.5	3	18.0	1	1.6	6	45.7	3	13.2	9	47.3	17	86.1	14	42.8	2	30.0	1	17.0
Laurens	2	20.5	1	1.5	2	2.5	3	18.0	4	19.1	7	34.6	3	37.0	7	72.7	11	69.5	26	683.2	5	5.0	1	17.0
Lee	2	20.5	1	1.5	2	2.5	3	18.0	1	1.6	11	44.2	7	18.6	6	53.5	13	53.0	19	85.8	3	16.9	1	3.5
Lexington	2	20.5	1	1.5	2	2.5	3	18.0	2	1.4	11	27.1	4	38.5	7	20.2	9	27.4	10	28.9	8	8.9	1	3.5
McCormick	2	20.5	1	1.5	2	2.5	3	18.0	3	20.4	6	18.0	2	6.6	3	6.9	6	55.7	2	6.8	1	2.0	1	1.0
Marion	2	20.5	1	1.5	2	2.5	3	18.0	4	10.6	5	10.4	3	4.6	3	16.1	25	93.1	9	29.4	6	26.9	2	7.2
Marlboro	2	20.5	1	1.5	2	2.5	3	18.0	8	19.2	28	42.9	13	14.5	11	21.4	29	282.2	7	71.8	5	37.0	1	0.1
Newberry	2	20.5	1	1.5	2	2.5	3	18.0	6	17.3	8	31.0	1	0.2	3	23.9	8	49.4	4	491.3	3	19.9	1	0.1
Oconee	2	20.5	1	1.5	2	2.5	3	18.0	3	30.4	8	9.8	1	2.1	8	17.7	20	75.9	22	251.9	6	8.1	1	0.1
Orangeburg	2	20.5	1	1.5	2	2.5	3	18.0	14	166.8	55	607.3	30	193.5	26	171.3	104	1744.1	49	993.4	15	169.7	16	251.6
Pickens	2	20.5	1	1.5	2	2.5	3	18.0	5	23.4	6	19.3	4	3.7	15	41.9	25	160.4	30	179.6	8	10.5	1	2.0
Richland	2	20.5	1	1.5	2	2.5	3	18.0	10	104.9	21	256.8	16	416.1	17	207.5	48	429.3	22	148.2	3	3.7	8	35.8
Saluda	2	20.5	1	1.5	2	2.5	3	18.0	6	15.7	6	10.2	1	3.0	6	10.7	6	100.1	1	5.3	3	3.7	1	0.6
Spartanburg	2	20.5	1	1.5	2	2.5	3	18.0	6	15.7	6	10.2	1	3.0	6	10.7	6	100.1	1	5.3	3	3.7	1	0.6
Sumter	2	20.5	1	1.5	2	2.5	3	18.0	15	58.8	24	153.8	16	237.8	21	268.4	44	936.8	24	405.6	4	8.8	4	60.0
Union	2	20.5	1	1.5	2	2.5	3	18.0	1	4.0	8	16.0	1	1.0	8	21.3	11	33.7	19	280.7	5	9.0	2	1.0
Williamsburg	2	20.5	1	1.5	2	2.5	3	18.0	15	124.6	96	1510.3	31	279.5	66	822.6	153	5607.3	48	1103.4	14	565.4	2	2.1
York	2	20.5	1	1.5	2	2.5	3	18.0	5	23.1	2	100.5	1	1.0	7	34.9	16	88.9	21	414.9	3	44.8	2	1.2
Totals	71	391.1	89	302.4	91	345.2	182	670.0	274	1589.8	762	6996.9	398	3475.7	578	4372.9	1641	29,334.5	950	16331.1	288	2649.4	117	1856.1

TABLE 6 — CLASSIFICATION BY CAUSES
Fiscal Year 1962-63

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	45	0.9	1,056.2	23.4
Campers	171	3.1	1,977.6	11.5
Smokers	1,372	25.2	10,387.2	7.6
Debris Burning	1,459	26.8	17,353.3	11.9
Incendiary	1,655	30.5	31,882.1	19.3
Machine Use	203	3.7	2,254.3	11.1
Miscellaneous	536	9.8	3,404.4	6.3
TOTALS.....	5,441	100.0	68,315.1	12.5

TABLE 7—CAUSES OF FIRES—FIVE-YEAR-PERIOD
(Percent of Total)

CAUSES	1958-59	1959-60	1960-61	1961-62	1962-63	Average For 5-Year Period
Lightning	0.4	1.4	0.8	2.0	0.9	1.1
Campers	2.7	2.2	3.0	2.8	3.1	2.8
Smokers	33.0	32.2	32.8	31.6	25.6	31.0
Debris Burning	31.8	32.4	29.7	27.3	26.8	29.6
Incendiary	19.2	19.8	23.8	20.6	30.5	22.8
Machine Use	3.3	4.0	2.2	4.0	3.7	3.4
Miscellaneous	9.6	8.0	7.7	11.7	9.8	9.4

TABLE 8 — SUMMARY OF FOREST FIRES REPORTED IN SOUTH CAROLINA
FISCAL YEAR 1962-63

UNIT	Area Protected (Acres)	Number of Fires	No. Fires per 100,000 Acres Protected	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville	167,647	30	18	162.8	.10	5.4
Aiken	401,376	143	36	1,051.3	.26	7.4
Allendale	131,400	41	31	584.3	.44	14.2
Anderson	173,700	85	49	397.4	.23	4.7
Bamberg	126,000	80	63	1,134.7	.90	14.2
Barnwell	74,565	65	87	491.4	.66	7.6
Beaufort	165,000	53	32	1,771.4	1.07	33.4
Berkeley	399,091	323	81	5,343.2	1.34	16.5
Calhoun	123,500	15	12	111.9	.09	7.5
Charleston	271,114	145	53	1,039.2	.38	7.2
Cherokee	127,800	28	22	292.8	.23	10.5
Chester	260,023	41	16	319.4	.12	7.8
Chesterfield	310,000	78	25	2,035.3	.66	26.1
Clarendon	228,500	265	116	3,900.3	1.71	14.7
Colleton	465,000	227	49	3,598.0	.77	15.8
Darlington	208,500	126	60	700.7	.34	5.6
Dillon	144,100	104	72	578.8	.40	5.6
Dorchester	268,200	149	56	3,447.0	1.29	23.1
Edgefield	172,363	43	25	244.8	.14	5.7
Fairfield	338,957	34	10	249.2	.07	7.3
Florence	293,900	352	120	2,738.8	.93	7.8
Georgetown	415,600	155	37	3,760.4	.90	24.3
Greenville	267,800	199	74	998.7	.37	5.0
Greenwood	198,963	47	24	135.5	.07	2.9
Hampton	239,500	106	44	838.5	.35	7.9
Horry	557,600	255	46	4,349.6	.78	17.1
Jasper	303,400	135	44	2,176.6	.72	16.1
Kershaw	336,500	76	23	1,269.1	.38	16.7
Lancaster	199,400	59	30	292.3	.15	4.9
Laurens	244,621	73	30	958.3	.39	13.1
Lee	110,600	64	58	277.5	.25	4.3
Lexington	291,500	65	22	190.3	.07	2.9
Marion	224,700	68	30	216.6	.10	3.2
Marlboro	150,600	116	77	514.3	.34	4.4
McCormick	144,859	30	21	164.1	.11	5.5
Newberry	204,949	38	18	645.1	.31	16.9
Oconee	257,632	82	32	400.5	.16	4.9
Orangeburg	318,800	325	102	4,399.5	1.38	13.5
Pickens	190,100	97	51	440.5	.23	4.5
Richland	289,500	183	63	1,804.9	.62	9.9
Saluda	149,946	25	17	160.8	.11	6.4
Spartanburg	208,300	84	40	752.9	.36	8.9
Sumter	205,400	168	82	2,196.6	1.07	13.1
Union	157,894	65	41	390.5	.25	6.0
Williamsburg	429,800	432	100	10,048.5	2.34	23.3
York	226,300	67	30	740.8	.33	11.1
TOTALS.....	11,175,000	5,441	49	68,315.1	.61	12.5

TABLE 9 — FIVE-YEAR SUMMARY
FOREST FIRE STATISTICS

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1958-59	11,175,000	4,608	39,612.3	0.35	8.6
1959-60	11,175,000	2,958	29,785.8	0.27	10.1
1960-61	11,175,000	4,776	59,969.8	0.54	12.6
1961-62	11,175,000	3,668	35,795.0	0.32	9.8
1962-63	11,175,000	5,441	68,315.1	0.61	12.5
Five-Year Average	11,175,000	4,290	46,695.6	0.42	10.8

**TABLE 10—S. C. STATE COMMISSION OF FORESTRY 1962-63 SEEDLING DISTRIBUTION
BY LAND CLASSIFICATION**

Land Ownership	Trees Planted
Farmers	26,870,575
Other Individuals	9,803,996
Associations & Clubs	678,950
Lumber Company	1,292,000
Pulp & Paper Co.	3,818,000
Other Industry	4,955,215
Schools ...	289,655
State Forests	5,156,000
Other State Lands	147,600
Cities, Towns, Counties	1,046,500
Federal Government	2,132,750
TOTAL	56,191,241

In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

Union Bag-Camp Paper Corporation	277,000
Catawba Timber Company	2,076,600
Continental Can Company	2,757,000
J. T. Strahan Company	16,000
Cole Page	1,000
Williams Furniture Company	40,700
West Virginia Pulp & Paper Company	2,812,000
Holly Hill Lumber Company	30,000
Totals	8,010,300
Grand Total, trees planted in S. C. 1962 63	64,201,541

In addition to the above tree planting, a total of 7,364 acres were direct seeded to pine during the fiscal year.

TABLE 11—S. C. STATE COMMISSION OF FORESTRY 1962-63 SEEDLING DISTRIBUTION
BY COUNTY AND SPECIES

COUNTY AND DISTRICT	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red Cedar	Yellow Poplar	Misc. Species	Total	Soil Bank	Other
Chesterfield	151,000	3,370,700	2,004,100	.....	5,500	18,000	1,000	5,550,300	114,500	5,435,800
Kershaw	745,700	3,846,800	46,500	25,000	3,000	14,000	.....	4,681,000	183,000	4,498,000
Lancaster	910,750	86,000	18,500	.....	1,000	.....	.....	1,016,250	44,500	971,750
Lee	205,000	438,500	9,000	.....	4,500	.....	.....	657,000	16,000	641,000
Richland	331,250	878,300	22,500	3,585	7,500	4,500	112	1,247,747	41,000	1,206,747
Sumter	320,500	1,031,500	463,500	6,000	5,500	11,000	.....	1,838,000	1,500	1,836,500
Total — Camden District	2,664,200	9,651,800	2,564,100	34,585	27,000	47,500	1,112	14,990,297	400,500	14,589,797
Darlington	66,250	327,750	47,000	.....	3,000	6,000	.....	450,000	29,500	420,500
Dillon	148,000	128,500	9,500	.....	1,000	2,500	.....	289,500	6,000	283,500
Florence	155,000	225,500	79,000	45,000	4,000	50,000	500	559,000	2,000	557,000
Horry	231,600	737,100	4,100	10	12,910	3,010	165	987,995	22,000	965,995
Marion	336,500	279,500	12,500	.....	5,000	5,000	.....	638,500	.....	638,500
Marlboro	43,000	398,000	6,000	.....	10,000	3,000	..	460,000	99,000	391,000
Total — Florence District	980,350	2,096,350	158,100	45,010	35,010	69,510	665	3,384,995	128,500	3,256,495
Berkeley	282,100	679,600	6,600	500	600	500	700	970,600	.....	970,600
Clarendon	617,000	953,500	.....	.....	1,000	4,000	1,000	1,576,500	76,750	1,499,750
Georgetown	453,000	570,000	2,000	.....	.....	1,000	..	1,026,000	.....	1,026,000
Williamsburg	333,500	366,500	15,250	1,000	3,000	6,000	.....	726,250	12,500	712,750
Total — Kingstree District	1,685,600	2,569,600	23,850	1,500	4,600	11,500	1,700	4,298,350	89,250	4,209,100
Abbeville	720,500	52,000	22,400	500	5,300	15,500	.....	826,200	.....	826,200
Chester	1,419,500	30,100	39,625	1,000	1,500	3,250	10	1,464,985	4,000	1,460,985
Edgefield	700,000	30,000	2,000	1,500	2,000	1,000	.....	736,500	.....	736,500
Fairfield	664,500	212,000	.....	.....	2,000	.....	.....	878,500	45,000	833,500
Greenwood	700,000	23,500	2,500	1,500	1,500	6,000	.....	735,000	.....	735,000
Laurens	1,103,100	500	2,500	.....	4,000	7,500	.....	1,117,600	5,500	1,112,100
McCormick	394,250	41,000	1,500	.....	1,000	2,000	.....	439,750	.....	439,750

Newberry	396,500	5,000	5,000	500	4,500	16,000	....	427,500	..	427,500
Saluda	108,500	43,000	....	....	3,000	....	....	154,500	7,000	147,500
Total — Newberry District	6,206,850	407,100	85,525	5,000	24,800	51,250	10	6,780,535	61,500	6,714,035
Aiken	94,500	4,100,000	422,500	1,500	41,500	2,000	1,500	4,663,500	1,000	4,662,500
Allendale .....	....	585,500	2,000	....	....	7,000	....	594,500	2,000	592,500
Bamberg	845,700	335,500	2,750	....	1,500	6,000	250	1,191,750	....	1,191,750
Barnwell .....	....	742,500	....	....	....	61,000	....	803,500	5,500	798,000
Calhoun	43,000	208,000	....	....	1,500	....	....	252,500	....	252,500
Lexington	79,500	2,229,500	220,500	1,100	10,100	1,000	500	2,542,200	....	2,542,200
Orangeburg	129,000	1,858,100	27,000	100	4,500	58,000	1,100	2,077,800	82,000	1,995,800
Total — Orangeburg District	1,191,750	10,059,100	674,750	2,700	59,100	135,000	3,350	12,125,750	90,500	12,035,250
Anderson	471,900	5,500	600	12,610	15,600	4,745	1,032	511,987	....	511,987
Cherokee	519,000	5,010	9,760	700	2,000	1,600	70	538,140	32,500	505,640
Greenville	1,098,950	4,500	3,700	23,950	12,350	43,000	600	1,187,050	....	1,187,050
Oconee	1,296,170	6,060	1,250	2,855	4,600	16,950	25,950	1,353,825	30,200	1,323,625
Pickens	482,350	1,000	4,200	17,745	1,550	2,700	4	509,549	13,500	496,049
Spartanburg	2,075,230	2,600	7,700	21,750	2,785	21,250	2,600	2,133,935	22,700	2,111,235
Union	1,035,500	....	....	500	3,000	....	....	1,039,000	2,000	1,037,000
York	1,804,000	37,100	2,700	3,600	15,500	31,250	....	1,894,650	5,000	1,889,650
Total — Spartanburg District	8,783,120	61,760	29,910	83,710	57,385	121,495	30,256	9,168,136	105,900	9,062,236
Beaufort	82,000	197,500	1,000	....	1,000	7,000	....	288,500	....	288,500
Charleston	96,000	106,000	1,000	....	1,500	50,100	1,000	255,600	....	255,600
Colleton	564,000	393,500	5,500	500	5,000	76,000	....	1,044,000	20,000	1,024,000
Dorchester	479,000	327,000	17,000	....	500	....	500	824,000	....	824,000
Hampton	46,000	440,500	31,500	1,000	5,000	....	....	524,000	....	524,000
Jasper	263,000	1,013,500	....	....	....	4,000	....	1,280,500	....	1,280,500
Total — Walterboro District	1,530,000	2,478,000	56,000	1,500	13,000	137,100	1,500	4,216,600	20,000	4,196,600
Experimental	962,106	173,400	2,012	100	100	84,100	4,760	1,226,578	....	1,226,578
STATE TOTAL	24,003,976	27,497,110	3,594,247	174,105	220,995	657,455	43,353*	56,191,241	896,150	55,295,091

* Shortleaf	16,200	Table Mountain Pine	260	Black Walnut	2,220
Scotch Pine	5,372	Himalayan Pine	15	Osage Orange	5
Red Bud	74	Adirondack Pine	260	Sweetgum	110
Magnolia	2	Virginia Pine	14,015	Dogwood	60

TABLE 12—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

COUNTY	Seedlings Planted 1929-62	Seedlings Planted 1962-63	Grand Total Planted To Date	Acres Planted Through June 30, 1963	Acres Needing Planting as of June 30, 1963
Abbeville	18,680,788	959,200	19,639,988	19,640	133,103
Aiken	117,697,569	5,266,500	122,964,069	122,964	248,702
Allendale	39,951,445	1,306,500	41,257,945	41,258	41,813
Anderson	27,717,897	562,987	28,280,884	28,281	192,891
Bamberg	24,704,150	1,579,750	26,283,900	26,284	38,306
Barnwell	70,438,980	932,500	71,371,480	71,371	65,161
Beaufort	6,801,595	288,500	7,090,095	7,090	54,978
Berkeley	27,352,335	1,336,600	28,688,935	28,689	107,504
Calhoun	13,617,525	252,500	13,870,025	13,870	47,604
Charleston	5,978,190	535,300	6,513,490	6,513	67,642
Cherokee	11,910,381	566,140	12,476,521	12,477	124,620
Chester	21,881,400	1,627,985	23,509,385	23,509	148,230
Chesterfield	56,402,300	5,608,300	62,010,600	62,011	168,655
Clarendon	17,362,215	2,026,500	19,388,715	19,389	27,215
Colleton	37,234,305	1,267,000	38,501,305	38,501	111,108
Darlington	12,813,920	450,000	13,263,920	13,264	69,161
Dillon	6,481,955	289,500	6,771,455	6,771	32,342
Dorchester	22,923,480	1,249,000	24,172,480	24,172	81,368
Edgefield	14,978,538	780,500	15,759,038	15,759	54,845
Fairfield	20,253,219	878,500	21,131,719	21,132	130,568
Florence	6,139,618	559,000	6,698,618	6,699	52,896
Georgetown	16,964,600	1,328,000	18,292,600	18,923	91,656
Greenville	14,872,204	1,187,050	16,059,254	16,059	204,618
Greenwood	17,974,272	735,000	18,709,272	18,709	58,656
Hampton	32,376,865	763,500	33,140,365	33,140	82,367
Horry	18,332,900	1,049,995	19,382,895	19,383	141,792
Jasper	28,722,130	1,455,000	30,177,130	30,177	61,105
Kershaw	81,626,737	5,167,200	86,793,937	86,794	148,437
Lancaster	22,102,303	2,019,650	24,121,953	24,122	117,186
Laurens	33,542,459	1,461,600	35,004,059	35,004	142,815
Lee	10,710,555	657,000	11,367,555	11,368	60,074
Lexington	28,026,490	2,542,200	30,568,690	30,569	155,042
McCormick	8,439,925	461,750	8,901,675	8,902	80,045
Marion	6,981,045	638,500	7,619,545	7,620	15,143
Marlboro	20,208,430	460,000	20,668,430	20,668	13,088
Newberry	21,905,073	427,500	22,332,573	22,333	89,777
Oconee	13,329,895	1,353,825	14,683,720	14,684	240,192
Orangeburg	44,153,350	2,086,800	46,240,150	46,240	54,036
Pickens	13,694,460	509,549	14,204,009	14,204	184,841
Richland	30,754,593	1,390,747	32,145,340	32,145	126,371
Saluda	8,029,471	154,500	8,183,971	8,184	46,842
Spartanburg	27,968,599	2,436,935	30,405,534	30,406	201,244
Sumter	35,312,392	1,838,000	37,150,392	37,150	55,011
Union	19,299,774	1,166,000	20,465,774	20,466	133,536
Williamsburg	11,033,765	1,234,250	12,268,015	12,268	67,163
York	26,130,526	2,127,650	28,258,176	28,258	195,749
Experimental	135,095	1,226,578	1,361,673	1,362	.. .. .
TOTAL.....	1,173,949,713	64,201,541	1,238,151,254	1,238,740	4,764,826

STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1963 TO JUNE 30, 1964



JOHN R. TILLER, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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To Honorable Donald S. Russell, Governor, and to the General Assembly of South Carolina:

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual report upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1963 to June 30, 1964.

Respectfully submitted,

STATE COMMISSION OF FORESTRY

Fulton B. Creech, *Chairman.*

S. C. COMMISSION OF FORESTRY

MEMBERS OF THE COMMISSION

Fulton B. Creech, Chairman, Sumter

Dr. Robert C. Edwards, President, Clemson College, Clemson

C. H. Niederhof, Charleston

A. Brandon Taylor, Jr., Spartanburg

Robert R. Rigby, Jr., Columbia

ADMINISTRATION

John R. Tiller, State Forester and Secretary to the Commission

John M. Shirer, Assistant State Forester, Fire Control

Edward C. Pickens, Assistant State Forester, Management

Walter T. Ahearn, Assistant State Forester, Information and Education

Howard R. Scott, Assistant State Forester, Administration

E. R. Vreeland, State Park Director



Members of the Forestry Commission, left to right: Robert R. Rigby, Jr., C. H. Neiderhof, Dr. Robert C. Edwards, Fulton B. Creech, and A. Brandon Taylor, Jr.

Information and Education

INTRODUCTION

South Carolina's 12 million acres of forest land provide an annual return of more than a third of a billion dollars in growing, harvesting, manufacturing, transporting and sale of forest products.

The needs of our ever increasing population demand that each forest acre produce the maximum amount of usable wood fiber, protect soil and water supplies, and provide for the recreational needs of the citizens of the state.

Every employee of the Commission of Forestry has a part in the educational program designed to reach each South Carolinian. Through various means citizens are made aware of their responsibilities in conserving our natural resources so that present and future generations may use and enjoy them to their fullest.

Supporting the state's third largest industry, our woodlands provide a livelihood for thousands of people. Yet the state's woodlands are producing less than half of their potential capacity. The aim of the Commission's educational program is to help the landowners and people of the state realize the potential value of our woodland and apply the necessary conservation practices that will help double the timber production.

Points of emphasis in the Commission's information and education efforts in promoting wise land use are:

1. Forest fire protection: more than 3,800 illegal woods fires burned during the year in South Carolina, with 99 per cent being caused by people.
2. Unwise cutting practices mean low production and inferior forest products.
3. Trees should be planted on more than five million acres of idle or unproductive land.
4. Improvement of the quality of many existing stands of timber throughout the state by removing inferior species as well as low grade and poor-quality trees.
5. Full appreciation should be developed in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of South Carolina.



FOR FUTURE FORESTS
PLANT TREES
PREVENT FIRES

JANUARY, 1908						
SUN	MON	TUE	WED	THUR	FRI	SAT
			1	2	3	4
26	27	28	29	30	31	Full Moon

SOUTH CAROLINA
STATE COMMISSION OF FORESTRY

County rangers and wardens help distribute 8,000 wall calendars and 50,000 pocket calendars as a part of South Carolina's forest fire prevention efforts.

FOREST FIRE PREVENTION

In the Commission's 1929 Annual Report, Lewis E. Staley, then State Forester, said, "While light burning may not kill the larger trees, unquestionably the basis for future forests—the baby trees—are practically all destroyed. This is an indisputable fact." To this day, it is upon this "indisputable fact," *that even little fires kill little trees*, that the primary approach of the Commission to forest fire prevention is based. Through a program beginning with personal contacts the need for preventing wild fires is brought to the attention of every man, woman and child in the state. Personnel of the Commission, in addition to the basic personal contact, utilize other media of communication such as posters, pocket and wall calendars, roadside signs, exhibits, publications, illustrated talks, newspaper articles and radio and television programs to bring the conservation message to each citizen of the state.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The Cooperative Forest Fire Prevention Campaign supplements local materials and programs with those published or produced in cooperation with the federal government and other states. It reinforces local efforts to reach, in one way or another, every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, bookmarks, newspaper ads, radio platters, TV spots, films, and other materials to bring forest fire prevention information and reminders to men, women and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message, provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flash-



The familiar and popular Smokey Bear is shown posting the rules for effective forest fire prevention on a national Cooperative Forest Fire Prevention Campaign poster. As cooperators in the national campaign, Commission personnel were active in getting such posters displayed throughout South Carolina.

lights, wallets, moccasins, T-shirts, scarfs, fishing tackle, archery sets, cigarette snuffers, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, coloring books, comic books, story books, bubble bath, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls and other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Feeling the need for a more southern slant than the national campaign can provide, the states and the U. S. Forest Service in the Southern region have continued to cooperate in the production of forest fire prevention materials with a Southern flavor. The sixth year's operation of the Southern program saw continued production of recorded radio spots, a series of TV spots, news ads, and a poster, all of which are currently being distributed. The Southern materials supplement the national materials to intensify and strengthen forest fire prevention efforts in South Carolina.

SCHOOL PROGRAMS

School children throughout the state received basic information on forestry and forest fire prevention from foresters, rangers, and wardens of the Commission of Forestry. Some 980 programs were held in the fifth and sixth grades, where schoolyard demonstrations of fire control equipment and suppression techniques, flip charts and color slides were used to help bring the conservation story to the classroom. In these two grades alone, 48,284 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slide programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations mentioned above, all third grade children throughout the state (more than 70,000) received a copy of the booklet "Smokey Bear's Story of the Forest". An equal number of second grade students received coloring sheets with forest fire prevention and conservation messages. Over 65,000 fourth graders received a color comic book entitled "The True Story of Smokey the Bear."

Through the cooperation of the Southern Pulpwood Conservation Association and its member mills in South Carolina, 60,000 copies of a 16-page booklet pointing out the values of



A warden, with the help of a flip chart, explains to a group of 5th grade school children the function of the Commission's county forest fire control organization.

trees entitled "Your Fabulous Friend" were made available to the Commission for distribution to 6th grade pupils.

Many forestry movies were also shown in schools, bringing conservation information to students of all grade levels.

The Commission's school programs are designed to add to each child's understanding of the total stewardship of life, building toward a stronger and more appreciative community of the future. The program gives basic instruction and information to children on the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

FORESTRY DEMONSTRATIONS

During the year 2,808 persons attended 113 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species and timber stand improvement.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson College Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies, and organizations cooperated to make the observance of 1963 Arbor Day and Conservation Week a success. South Carolina Law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 55,000 copies of a special folder were printed and distributed to schools and other interested groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

FIRE PREVENTION ROADSIDE SIGNS

Roadside signs continued to carry three messages in the following sequence: USE YOUR ASH TRAY — HELP PREVENT WOODS FIRES — PROTECT LITTLE TREES, KEEP SOUTH CAROLINA GREEN. First erected in February 1953, the fire prevention roadside signs appear on highways throughout the state. The Commission keeps this project going by purchasing about 100 new sets each year and replacing worn out and damaged signs where thousands of motorists will continue to see these forest fire prevention reminders as they travel the highways.

MOTION PICTURES

Motion pictures are a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with motion picture equipment which is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school and church groups, civic clubs, community organizations, woodland owners, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 33,459 people saw motion pictures on forestry at 283 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

In 1930 forestry was added as a course of study in vocational agriculture classes in South Carolina. Each year the Agricultural Education staff of the State Department of Education and the State Commission of Forestry work together to teach vocational agriculture students the importance of forest conservation.

School forest laboratories serve as aids in teaching forestry. They are "outdoor classrooms" where young men learn to do by doing. The students construct firebreaks to protect their laboratory from fire. They learn to plant trees, eliminate weed trees, select, measure, and estimate merchantable volumes in trees which are to be removed. Timber in need of cutting is sold under contract as the students learn to market forest products. The laboratory is divided into a number of small plots to be worked one a year. One plot is left untreated for comparison with those where good forestry practices are carried out.

One-day forestry workshops for teachers of vocational agriculture, held during the summer of 1963, have been followed up by emphasis on establishing school forest laboratories at schools which do not yet have them.

The Forestry Commission sponsors an annual FFA and NFA Chapter Forestry Contest in cooperation with the Agricultural Education staff of the State Department of Education. For the school year 1963-64 \$60 and an engraved plaque were presented for outstanding forestry work to FFA and NFA Chapters in each Vocational Agriculture District as follows:

DISTRICT I

Pendleton FFA Chapter
Bryson NFA Chapter

DISTRICT II

Fort Mill FFA Chapter
No NFA winner

DISTRICT III

Strom Thurmond FFA Chapter
Edgefield NFA Chapter

DISTRICT IV

Walter FFA Chapter
Lockett NFA Chapter

DISTRICT V

South Side FFA Chapter
No NFA winner

DISTRICT VI

Socastee FFA Chapter
Whittemore NFA Chapter

RESOURCE—USE EDUCATION

Resource-use education continues to stimulate interest in the out-of-doors as an aid to effective teaching, as well as a means of instilling conservation concepts.

State park nature trails served effectively as "outdoor classrooms" as forestry and state park personnel worked with many school groups and others in carrying out projects and instruction in the field of conservation.

Commission personnel aided with instruction and demonstrations as the State Department of Education included tree study and forest fire prevention emphasis at its three camps for high school home economics students during the summer of 1964.

The resource-use education workshop at the University of South Carolina was reinstated during the year and Forestry Commission personnel provided instruction in forestry and the use of state park facilities. Plans were also made to work with a similar group at Clemson University early in the coming year.

The S. C. State Commission of Forestry continued its cooperation with the South Carolina Advisory Council on Conservation Education, composed of representatives of conservation agencies and groups, State Department of Education, teachers and others.

This group produced two additional video tape programs for the South Carolina History series which is telecast by the S. C. Educational Television Center. These were on the themes "Soil and Water" and "Forests and Wildlife," showing how their use, or misuse, has affected the history of our state. These will be used along with a tape produced last year on general conservation, and its influence on the state's history.

TALKS

State Commission of Forestry personnel give talks about forestry and state parks before many groups. The use of color slides with many of the talks helps make them more interesting and more effective.

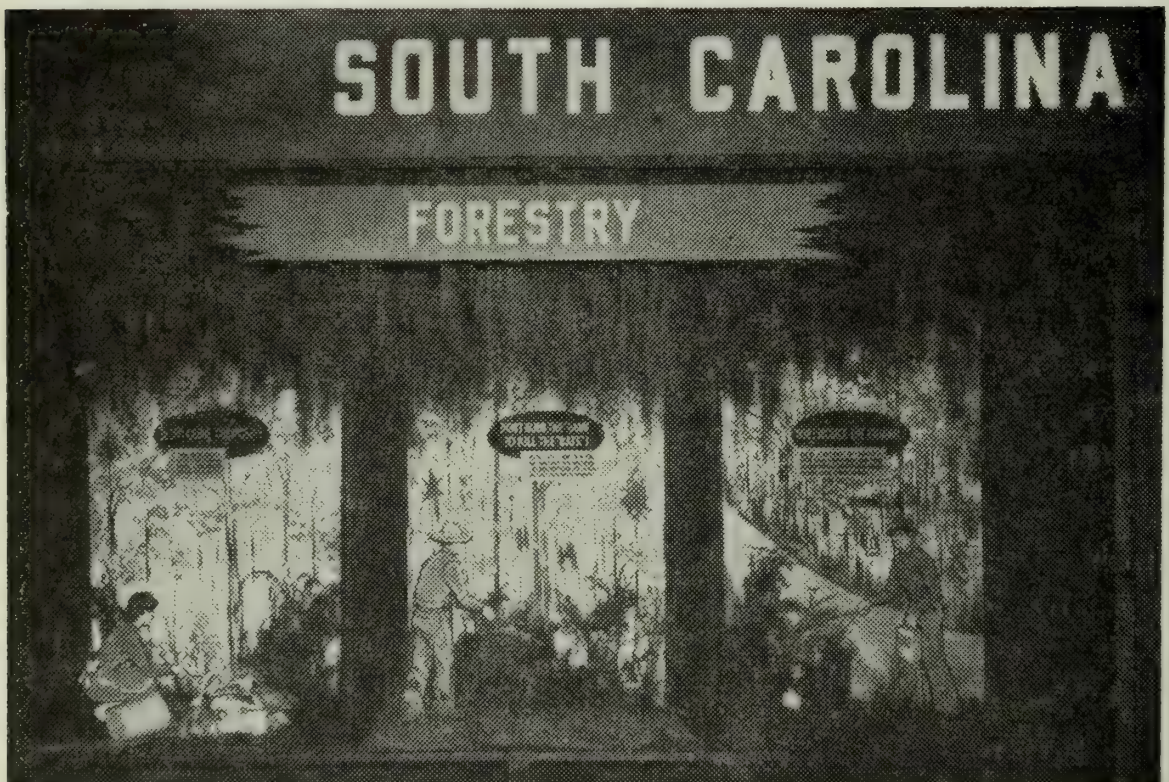
During the year a total of 295 talks were made by Commission personnel to 11,187 people. Garden clubs, church groups, school groups, and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. As one example of the number of people reached, during the past year 20,177 persons visited Commission fire towers, where the work of detecting, reporting, dispatching, fighting and preventing fires was explained or demonstrated.

EXHIBITS

Exhibits provide an excellent means of placing forestry and state park information before the people.

More than 1¼ million people saw forestry and state park exhibits and displays in fairs, parades, and special meetings as follows:



The three main causes of woods fires—careless, intentional, and malicious—were highlighted at the 1963 State Fair.

Exhibits at State and County Fairs

Location of Exhibit - County Fair	Type of Exhibit	Est. Attend.
Abbeville	It's a Wise Man Who Looks Ahead	7,000
Chester	There's Power in the Forest	3,000
Greenwood	It's a Wise Man Who Looks Ahead	50,000
Greenville	Bugs in Your Pines?	65,000
Anderson	Bugs in Your Pines?	80,000
Anderson (N)	Bugs in Your Pines?	60,000
Kershaw	There's Power in the Forest	11,000
York	It's a Wise Man Who Looks Ahead	15,000
Pickens	Commercial Woods of S. C.	30,000
Florence	A Forest Is More Than Trees Diorama	100,000
Spartanburg	Beetles in Your Pines?	85,000
Newberry-Saluda	Judge Smokey Diorama	29,000
Chesterfield	There's Power in the Forest	7,000
Orangeburg	Judge Smokey Diorama	15,000
Berkeley	Commercial Woods of S. C.	1,400
Chester (N)	Gum Cross Section	1,500
Sumter	It's a Wise Man Who Looks Ahead	18,000
Dillon	A Forest Is More Than Trees Diorama	4,500
Dillon (N)	Commercial Woods of S. C.	4,000
Marion	A Forest Is More Than Trees Diorama	11,000
Union	It's A Wise Man Who Looks Ahead	35,000
Lee	There's Power in the Forest	5,000
Laurens	There's Power in the Forest	20,000
Lancaster	There's Power in the Forest	10,000
McCormick	Judge Smokey Diorama	4,000
Beaufort	It's a Wise Man Who Looks Ahead	15,000
Loris	A Forest is More Than Trees	9,000
Marlboro	There's Power in the Forest	3,000
Allendale	It's the Law	2,500
Sumter (N)	It's a Wise Man Who Looks Ahead	15,000
Colleton	A Forest is More Than Trees	8,000
Georgetown	Commercial Woods of S. C.	870
Clarendon	Commercial Woods of S. C.	150
TOTAL, County Fair Exhibits		724,920

State Fairs

Columbia	Fire Occurrence and Responsibility (Keystone Cop)	136,000
Columbia (N)	Fire Occurrence and Responsibility (Keystone Cop)	91,000
TOTAL, State Fair Exhibits		227,000
TOTAL, Fair Exhibits		951,920

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

Columbia (Fire Prevention Parade) Smokey Bear on Ranger's Truck.....	45,000
Shaw Air Force Base (Fire Prevention Parade) Smokey Bear on Ranger's Truck....	9,000
Cheraw (Christmas Parade) Smokey Bear and Christmas Message....	12,000
Pageland (Watermelon Festival) Smokey Bear on Ranger's Truck.....	26,500
Chesterfield (Christmas Parade) Smokey Bear and Christmas Message.....	9,000
Latta (Skillet Fair) Commercial Woods of S. C.....	3,000
Dillon (Christmas Parade) Smokey Bear on Float.....	10,000
Latta (Christmas Parade) Smokey Bear on Float.....	6,000
Dillon (S. C. National Bank) Commercial Woods of S. O.....	2,000
Latta (Latta Bank) Commercial Woods of S. C.....	2,000
Aynor (Christmas Parade) Smokey Bear on Float.....	4,000
Bennettsville (Christmas Parade) Smokey Bear on Float.....	3,500
Williamsburg (Fire Prevention Parade) Fire Control.....	150
Manning (Christmas Parade) Fire Control.....	750
Moncks Corner (Christmas Parade) Fire Control.....	300
Newberry (Christmas Parade) Fire Control.....	25,000
Newberry (Clean-up Week Parade) Fire Control.....	6,000
Bamberg (Parade) Smokey Bear on Float.....	4,000
Blackville (Christmas Parade) Smokey Bear on Float.....	3,500
Barnwell (Christmas Parade) Smokey Bear on Float.....	5,000
Williston (Christmas Parade) Smokey Bear on Float.....	2,500
Gilbert (Parade) Smokey Bear on Float.....	6,500
Lexington (Parade) Smokey Bear on Float.....	10,000
Pelion (Christmas Parade) Smokey Bear on Float.....	4,000
Boiling Springs (Parade) Smokey Bear on Float.....	3,500
Lexington (Lake Murray Center) Smokey Bear on Float.....	1,000
St. Matthews (Electric Fair) Forestry Panel.....	3,000
Orangeburg (Garden Club Show) Wood Panel.....	1,000
Orangeburg (Southern National Bank) Insect Panel.....	1,000
Orangeburg (Southern National Bank) Insect Panel.....	1,000
Orangeburg District (Agriculture Building) There's Power in the Forest.....	8,000
Clemson (Farm and Home Week) There's Power in the Forest.....	35,000
Orangeburg District (County Office Building) There's Power in the Forest.....	3,000
Greenville (County Office Building) It's a Wise Man Who Looks Ahead.....	7,000
Cherokee (County Office Building) It's a Wise Man Who Looks Ahead.....	2,000
Spartanburg (County Library) There's Power in the Forest.....	1,000
Hardeeville (Christmas Parade) Smokey Bear on Float.....	1,000
Charleston (Christmas Parade) Smokey Bear on Float.....	60,000
Walterboro (Christmas Parade) Smokey Bear on Float.....	5,000
Hampton (Christmas Parade) Smokey Bear on Float.....	5,000
Hampton (Watermelon Festival) Smokey Bear on Float.....	7,000
Ridgeland (Christmas Parade) Smokey Bear on Float.....	2,500

Total, Floats and Displays..... 346,200

GRAND TOTAL, Exhibits, Floats, Displays..... 1,298,120

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperate generously with the Forestry Commission by providing air time for many programs on forest fire prevention, forest management and other phases of forestry, and on educational and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that at least 349 live or taped radio and TV programs on state parks and forestry were presented during the year. This number does not include the many hundreds of recorded programs and film spots carried by radio and television stations, using material made available through the national and South-

ern Cooperative Forest Fire Prevention Campaigns, and spot announcement material prepared by the Commission of Forestry for special use during periods of high fire danger.

COOPERATION WITH OTHER ORGANIZATIONS

Among the various organizations cooperating with the Forestry Commission during the past year were the South Carolina Bankers Association and the Kiwanis Clubs of the state.

Some 75,000 stuffers "Forestry Services for Woodland Owners" prepared by the Forestry Commission were mailed as statement stuffers by cooperating banks throughout the state.

The Forestry Commission furnished forest tree seedlings to Kiwanis Clubs throughout the state to publicize tree planting as a part of the Kiwanis Golden Anniversary celebration. Forestry Commission foresters presented talks at regular meetings of many Kiwanis Clubs in connection with giving each Kiwanian a tree seedling to plant. Publicity given this project helped spotlight the need and the opportunities for tree planting in South Carolina.

NEWS RELEASES AND ARTICLES

Newspapers provided excellent coverage, placing forestry and state park news before the people regularly.

During the year Commission personnel prepared 620 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, such as during serious fire situations, news items are given orally to individual papers and to the wire services.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or prepared mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

BOYS' FORESTRY CAMP

The seventeenth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park during the year. Ninety-four young men representing every county in the state attended the week-long camp. One boy from each county was selected by each county ranger from postal cards written by boys interested in attending the camp.

On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson College Extension Service for forestry activities in the 4-H Clubs.

Again, a group of Explorer Scouts attended camp, acting as junior counselors.

Programs of study and recreation were combined to teach conservation to the boys. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm, as well as recreational opportunities offered by state parks.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson College Extension Service, American Forest Products Industries, Inc., various forest industry companies and associations, and other organizations, groups, and agencies which publish material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park installations of the Commission of Forestry. The Commission's exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

The construction program continued this year on Harbison State Forest in preparation for moving the sign shop operation from Sumter to Columbia, along with all other central shop and warehouse facilities.

SOUTH CAROLINA TREE FARM SYSTEM

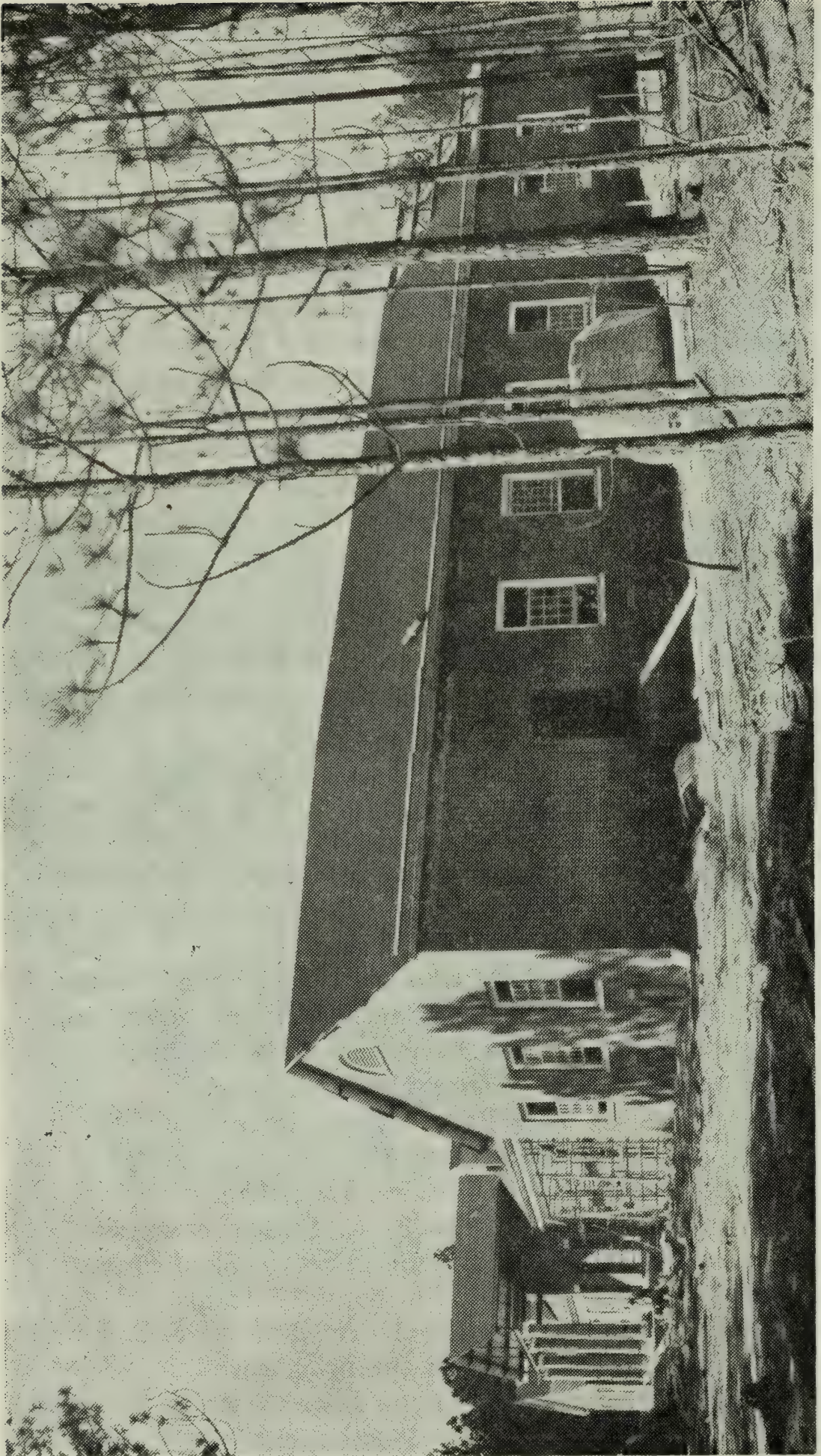
The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owners and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, the state representative of American Forest Products Industries, Inc., the national sponsor, with the cooperation of the S. C. State Commission of Forestry, the Clemson College Extension Service, and consulting foresters and woodland owners in South Carolina. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program.

As of June 30, 1964 there were 604 Tree Farms in the state, comprising 2,091,118 acres.



Being built under contract, the new state office building for the South Carolina State Commission of Forestry goes up on schedule. Located among the longleaf pines on Harbison State Forest on Highway 176, ten miles north of Columbia, it is scheduled for occupancy in September 1964.

Administration

SUMMARY

No state-appropriated funds were provided for salary or wage adjustments and as a result losses of both technical and other personnel continued at an excessive rate. A total of 88 employees resigned during the year of which 74% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and State Park program \$3,676,873.52. Of this total the Division of Forestry expended \$3,131,761.50 and the Division of State Parks \$545,112.02. (see Appendix for detailed explanation of funds available and expenditures made). State-appropriated funds amounted to \$1,951,953.00 for the Division of Forestry and \$443,339.00 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 51 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 10 accidents. Of the 10 accidents which occurred, 7 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and assistance of the National Safety County.

PERSONNEL

A large number of Commission employees continued to resign to accept better salaries. Such resignations handicapped the



State Forester C. H. Flory (right) who retired April 6, 1964 congratulates the new State Forester, John R. Tiller.

efficient operation of all Commission activities. Thirteen per cent of the total personnel resigned during the year; county unit personnel were the highest per cent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

State Parks

SUMMARY

The fiscal year 1963-64 was a "Year of Decisions" in the annals of the South Carolina State Parks. Momentous decisions gave continued life to these outstanding state facilities which serve the recreational needs of its citizens and visiting tourists.

On July 10, 1963, U. S. District Judge J. Robert Martin handed down a ruling which prohibited the segregated use of the South Carolina state parks, setting September 8, 1963 as the effective date for complying with this order.

This ruling called for thoughtful decisions by the Commission of Forestry for the following reasons:

a) The State Commission of Forestry by state statute was authorized to operate and supervise only racially separate parks.

b) The statute which decided the closing of Edisto Beach State Park in 1956, in the opinion of the Attorney General, clearly indicated the intent of the General Assembly to limit state park operations to a racially segregated status.

The Attorney General advised the State Commission of Forestry on August 19, 1963 that the state parks be closed September 8th, the effective date of the Federal Court order, and remain closed until the General Assembly might otherwise direct.

On August 20, 1963, at the meeting of the S. C. State Commission of Forestry, Chairman Fulton B. Creech released the following statement:

"Acting on the advice of the Attorney General, the State Commission of Forestry has decided to close the state parks at the close of business September 8, 1963, placing them on a caretaker and maintenance basis until such time as the General Assembly shall otherwise direct."

The park gates closed at 8:00 P.M., September 8, 1963.

On May 8, 1963, the House of Representatives created a five-member Committee to study the present and future needs of state parks. Several meetings were held by this Committee to assemble facility and use data, and to familiarize themselves with park operations. On July 19, 1963, Chairman J. Clator

Arrants announced a schedule of statewide public hearings for the purpose of gaining first-hand knowledge of the feeling of the public as to the future of state parks in the light of the Federal Court order which prohibited the operation of racially segregated parks.

The fourteen meetings held throughout the state clearly indicated that the public wished the state parks operated, with a majority favoring a somewhat restricted use, namely, the elimination of swimming.

Following the final public hearing in Columbia October 9, 1963, and meetings with the Governor and other state officials, the Study Committee issued a detailed report to the House of Representatives on January 14, 1964.

The report stated: "This Committee recommends that the state parks of South Carolina be opened to the public for general recreation, educational and forestry purposes and that publicly owned buildings and structures within the said state parks be closed to the general public; except that organized groups be allowed to use the pavilions, picnic areas, and meeting places within the state parks, upon first obtaining permission from the superintendent of the park involved."

In January, 1964, a Bill, H. 1959, was introduced in the House of Representatives embracing generally the recommendations of the Committee. After passage in the House, the Bill was sent to the Senate. After much debate the Bill was referred to a Conference Committee of six men, three from the Senate and three from the House, which concurred in an amended Bill. The Bill, as amended, was adopted by both Houses, and was signed by the Governor April 24, 1964, becoming Act. No. 1047, providing authority for re-opening the state parks.

During the latter part of April and early part of May, 1964, conferences were held by the State Forester, State Parks staff and the Attorney General to formulate a detailed park operation plan and rules and regulations to comply with the provisions of the Act.

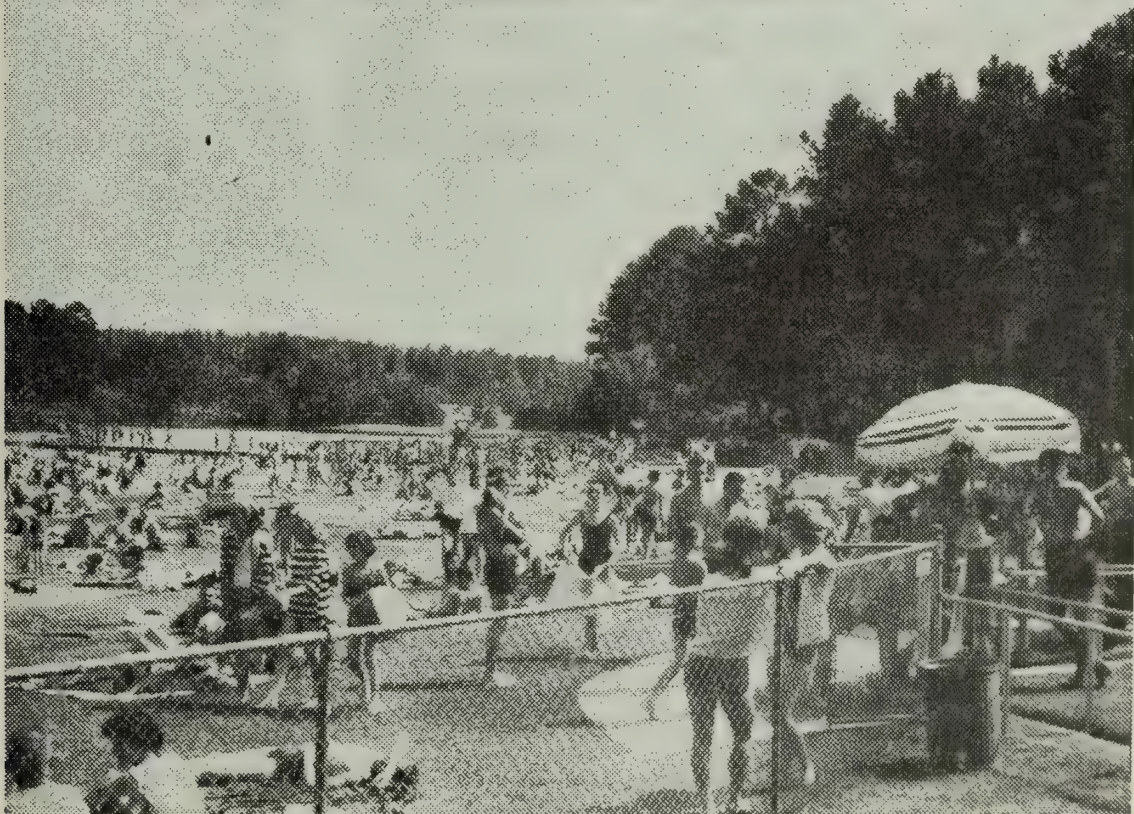
On May 11, 1964 the Commission of Forestry met, and at the conclusion of the meeting, Chairman Fulton B. Creech issued the following statement:

"The 1964 General Assembly enacted legislation which authorizes the re-opening of the State Parks on a highly

restrictive basis. The Forestry Commission, shall, to the best of its ability, operate the state parks in accordance with the provisions set forth in Act. No. 1047."

The rules and regulations governing the operation of the state parks and the operating plan were reviewed and approved by the Commission, and concurred in by the Attorney General.

The state park gates were opened at 9:00 A.M., June 1, 1964.



Legislative restrictions on use of state park facilities drastically reduced attendance such as shown in the above pictures.

ATTENDANCE

There was a marked decrease in state park attendance from the previous year. The 1,846,016 park visitors numbered 1,460,485 fewer than the 3,306,501 attendance of 1962-63. This reduction was the natural result of the parks being closed from September 8, 1963 to June 1, 1964, when they re-opened with restrictions which prohibited swimming and the use of family cabins. Family camping was also prohibited in two parks, Myrtle Beach and Santee, which normally serve many campers. All activities other than fishing and nature trail use were prohibited in Santee State Park.

There were 61,470 fewer out-of-state cars counted in the parks representing approximately 250,000 fewer tourist visitors to the state parks.

Individual park use was off from about 4,000 in the smaller parks to over 140,000 in some of the larger parks—Myrtle Beach 148,624, Sesquicentennial 137,188, and Hunting Island 107,666.

APPROPRIATIONS

The \$278,033 budget appropriation for the fiscal year 1964-65, a reduction of \$137,763 from the \$415,796 budget of 1963-64, posed major operating problems.

This budget would not provide for filling vacant positions which are badly needed. The appropriation did not provide for normal extra summer personnel, nor adequate funds for recurring expenditures such as telephone, electric power, and normal essential supplies.

Only emergency repairs can be made and general maintenance will need to await sufficient budget appropriations.

FAMILY VACATION CABINS

Nearly one thousand families were required to seek cabin vacation facilities elsewhere in 1964 as the use of the 65 very popular state park cabins was prohibited by legislative act. Each year the S. C. State Commission of Forestry receives some 1500 applications for cabin reservations. Early in March a public drawing was previously held and nearly 1000 families were privileged to enjoy a week's vacation in one of the state parks.

ORGANIZED GROUP CAMPS

Reservations for use of the seven organized group camps in the summer of 1964 could not be made in the normal manner due to the uncertainty of the parks re-opening. Inability to allot reservations in time for the requesting groups to make detailed plans for their camp in many instances made it necessary for them to cancel their program plans or seek other facilities. Later cancellations were made as several groups that had made tentative reservations learned that swimming was prohibited by the General Assembly.

FAMILY CAMPING

Family camping, which is increasing yearly nationwide, declined in South Carolina's state parks this year. In fact, 67,952 fewer campers were registered than last year. This decrease resulted from the parks being closed from September 8, 1963, to June 1, 1964, as well as the fact that use of swimming facilities is not permitted.



Family camping continued to be a popular activity in state parks although attendance in this and all other activities declined.

In addition, the two most heavily used family camping areas, Myrtle Beach and Santee State Parks, were closed to camping.

STATE HISTORICAL SITES

State Historical Sites are areas of historical significance that have been acquired by the state and turned over to the Division of State Parks for administration and maintenance. The seven sites so assigned are as follows:

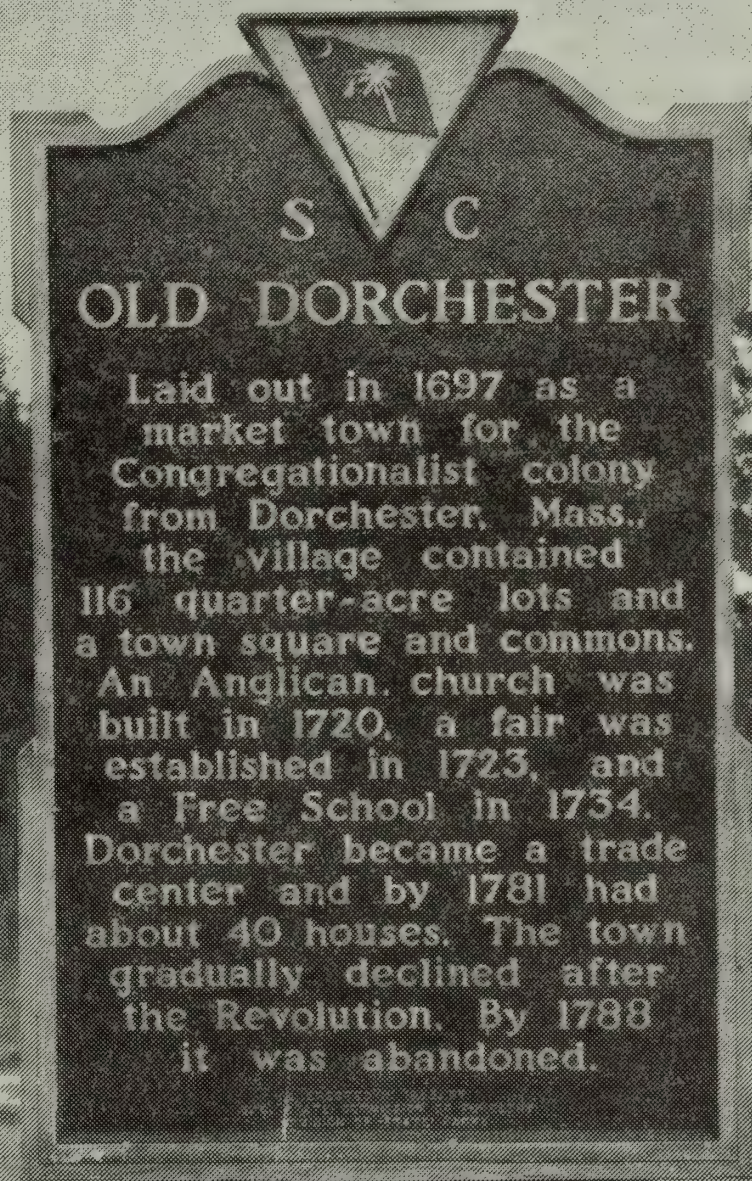
Eutaw Springs Battleground Site on the shore of Lake Marion near Eutawville in Orangeburg County. Markers tell of the last important battle of the Revolution in South Carolina.

Fort Watson Battle Site and Indian Mound on the shore of Lake Marion in Clarendon County is located one mile west of U. S. Highways 301 and 15, one mile north of the causeway over Lake Marion. A marker tells the story of the Revolutionary War fort built upon the Indian mound and its spectacular capture from the British.

General Francis Marion Burial Site near Pineville, in Berkeley County, one mile north of S. C. Highway 45. The grave of the "Swamp Fox" is in the family burial plot of his brother, Gabriel Marion on Belle Isle Plantation.

Old Dorchester Town Site 5 miles south of Summerville, off S. C. Highway 642 on the Ashley River in Dorchester County, marks the site of the colonial town of Dorchester, now long since abandoned; the brick tower, the only remaining sign of the Anglican Church of St. George; and the pre-Revolutionary tabby fort.

Rose Hill Historical Site the antebellum mansion of the Secession Governor, William Henry Gist, is located 10 miles south of Union, in Union County, south of Tyger River. Of interest are its landscaped gardens and its period furnishings.



Historic areas such as the site of Old Dorchester continued to get special attention as historic markers were placed and many other improvements were accomplished.

General Thomas Sumter Burial Site is located in the family burial plot in what was the garden of his Home House Plantation near Stateburg in Sumter County. Of interest is the quaint little "Chapel of Ease" over the grave of the General's daughter-in-law, Nathalie deLage Sumter, a French countess.

Colonel Isaac Hayne Burial Site is located one mile north of S. C. Highway 64 between Jacksonboro and Walterboro, a short distance out of Jacksonboro. His grave is in the family burial plot, in what was the garden of the Hayne antebellum home, Hayne Hall.

For the year 1963-64 an appropriation of \$27,543.00 was made available for maintenance and operation of these areas. In addition a carry over of \$689.90 from the Fort Dorchester "Special Fund" of the 1961-62 year was also spent in 1963-64.

Full time resident custodians are employed at Old Dorchester and at Rose Hill, while at Fort Watson, Eutaw Springs and the burial sites of Francis Marion, Isaac Hayne and Thomas Sumter, part-time caretakers, residing in the vicinity, maintain the areas.

General upgrading of all sites was continued throughout the fiscal year. Clearing up of hurricane damage and stump removal was necessary at several areas, and some fence repairs and construction were accomplished.

Two additional cast aluminum historical markers, official in design and lettering, were provided during the fiscal year. One is at the entrance to the Isaac Hayne site and the other at Eutaw Springs. The wording on these was authenticated by the South Carolina Archives Department.

During the fiscal year rest rooms were provided at Old Dorchester and an entrance was constructed to the area with wrought iron gates permitting two-way traffic. At Rose Hill, all window blinds were restored, over half of which had to be replaced with new ones to match. The entire exterior of the mansion was repaired and then painted, including the roof. The carriage house, which was in a deplorable state, was restored, not only to accommodate two old carriages but also to provide a repair shop which was partially equipped with power and hand tools.

STATE PARK VALUES

At the request of the House Committee to Study Present and Future Needs of the State Parks, the State Commission of Forestry prepared and issued in January, 1964, a 64-page report *South Carolina State Parks: History, Attendance, Values, Needs*. The following recapitulation of state park values is reproduced from this report:

RECAPITULATION OF STATE PARK VALUES *

State Park	Total Acres	Land Value	Included in Land Values are Timber Values of—	Water Dams Lakes	Buildings & Structures	Utilities	Roads & Bridges	Total Values
Aiken	1,067	\$ 125,000	\$ 50,000	\$ 18,750	\$ 29,500	\$ 6,150	\$ 12,500	\$ 191,900
Andrew Jackson	360	35,000	3,000	-----	47,750	4,500	7,500	94,750
Barnwell	307	30,000	5,000	25,000	51,000	5,500	10,000	121,500
Cheraw	7,361	735,000	225,000	130,000	282,500	65,000	42,000	1,254,500
Campbell Lake	50	2,500	-----	10,000	20,000	5,000	1,000	38,500
Chester	523	100,000	40,000	55,000	34,000	12,000	10,000	211,000
Croft	7,088	700,000	75,000	80,000	9,000	5,000	6,000	800,000
Edisto Beach	1,255	200,000	9,000	-----	75,850	7,500	10,000	293,350
Givhans Ferry	1,235	150,000	85,000	-----	57,100	8,250	6,000	221,350
Greenwood	914	180,000	90,000	-----	85,500	23,000	15,000	303,500
Hunting Island	5,000	500,000	75,000	-----	109,200	13,500	50,000	672,700
Huntington Beach	2,500	750,000	40,000	10,000	100,000	3,000	25,000	888,000
Kings Mountain	6,141	850,000	225,000	240,000	278,500	30,000	80,000	1,478,500
Lee	2,839	215,000	75,000	3,000	48,600	11,500	25,000	303,100
Little Pee Dee	835	87,000	13,000	25,000	39,500	7,000	15,000	173,500
Myrtle Beach	312	1,570,000	90,000	-----	255,600	40,000	12,000	1,877,600
Oconee	1,165	200,000	70,000	30,000	174,500	35,000	40,000	479,500
Paris Mountain	1,275	250,000	35,000	180,000	108,500	20,500	35,000	594,000
Pleasant Ridge	300	20,000	5,000	7,500	44,000	8,500	10,000	90,000
Poinsett	1,000	145,000	45,000	35,500	89,000	27,000	20,000	316,500
Burnt Gin-Mill Creek	85	4,250	-----	50,000	80,000	20,000	6,000	160,250
Rivers Bridge	390	30,000	10,000	-----	64,200	5,500	7,500	107,200
Santee	2,364	435,000	200,000	30,000	58,200	7,000	50,000	580,200
Sesquicentennial	1,445	300,000	30,000	55,000	54,750	24,000	10,000	443,750
Table Rock	2,860	255,000	50,000	95,000	175,750	20,000	21,000	566,750

TOTAL 48,681 \$ 7,875,500 \$ 1,545,000 \$ 1,079,750 \$ 2,372,500 \$ 414,400 \$ 526,500 \$12,268,650

*Values are estimates only. It should be realized that "total values" are the combined totals of the several classifications and that the elimination of any one classification reduces the total value by a greater amount than the value of that individual classification. For example, the removal of \$1½-million of "timber" from "land" reduces land value by a much greater degree than \$1½-million.

The timber value is difficult to appraise. It is not practical to cruse the total state park acreage and there is the question of how much of the area or what species and ages are to be considered. Much of the state park timber is more valuable in place than when cut down and removed.

Careful study of future facility needs clearly indicates need for immediate upgrading, enlarging, and adding new residences, camping areas, picnic areas, group camp facilities, boating and fishing docks, and vacation cabins. The estimated cost of this program is \$245,350, with long range needs of an additional \$525,500.

Funds to meet these needs may be available on a matching basis by participation in the federal Land and Water Conservation Fund Act.

An approved development and operation plan will be required by the Bureau of Outdoor Recreation to qualify for participation. These plans are now being prepared.

SOUTH CAROLINA STATE PARK FACILITIES

NAMES OF STATE PARKS With Post Office Address of Park Superintendents	Picnic Areas	Barbecue Pits *	Boating	Fishing	Group Camps *	Family Camping **	Fishing Pier	Recreation Bldg.*	Picnic Shelters*	Nature Trails	Museums	Swimming	Bathhouses	Family Cabins	Fishing Cabins	Tea Room—Grill
AIKEN																
Windsor, S. C.....	x	x	x	x		x			x	x						
ANDREW JACKSON																
Lancaster, S. C.....	x								x		x					
BARNWELL																
Blackville, S. C.....	x	x	x	x		x		x	x	x						
CAMPBELL LAKE																
RFD, Cheraw, S. C.....	x	x	x	x		x			x	x						
CHERAW																
Cheraw, S. C.....	x	x	x	x	x	x		x	x	x						
CHESTER																
Chester, S. C.....	x	x	x	x		x			x	x						
COLLETON WAYSIDE																
Canadys, S. C.....	x	x				x			x							
CROFT																
Route 1, Pauline, S. C.....	x								x							
EDISTO BEACH																
Edisto Island, S. C.....		Closed By Act of Legislature														
GIVHANS FERRY																
Ridgeville, S. C.....	x	x	x	x		x		x	x	x						
GREENWOOD																
Ninety Six, S. C.....	x	x	x	x		x			x	x						
HUNTING ISLAND																
Frogmore, S. C.....	x			x		x			x	x						
HUNTINGTON BEACH																
Murrells Inlet, S. C.....	x			x					x							
KINGS MOUNTAIN																
Kings Creek, S. C.....	x		x	x	x	x			x	x						
LEE																
Bishopville, S. C.....	x	x	x	x		x		x	x	x						
LITTLE PEE DEE																
Dillon, S. C.....	x	x	x	x		x			x							
MILL CREEK																
RFD, Wedgefield, S. C.....	x	x	x	x	x	x			x	x						
MYRTLE BEACH																
Myrtle Beach, S. C., Box 3446.....	x			x				x	x	x	x					
OCONEE																
Walhalla, S. C.....	x	x	x	x		x		x	x	x						
PARIS MOUNTAIN																
Greenville, S. C., Rt. 5, Box 221.....	x	x	x	x	x	x			x	x						
PLEASANT RIDGE																
Cleveland, S. C., Box 2, Jarrard Store.....	x		x	x		x			x							
POINSETT																
Wedgefield, S. C.....	x	x	x	x	x	x			x	x	x					
RIVERS BRIDGE																
Ehrhardt, S. C.....	x		x	x		x		x	x	x	x					
Santee																
Route 1, Santee, S. C.....		Open only for Fishing, x Na. Trail Use														
ESQUICENTENNIAL																
Route 3, Columbia, S. C.....	x		x	x		x			x	x						
TABLE ROCK																
Pickens, S. C.....	x		x	x		x		x	x	x	x					

Prohibited by Act of Legislature

Closed by Act of Legislature

Use Prohibited by Act of Legislature

Use Prohibited by Act of Legislature

Closed by Act of Legislature

* Use by reservation 48 hours in advance. Permit required.

** Permit required.

SUMMARY OF STATE PARK USE—JULY 1, 1963 – JUNE 30, 1964

NAME OF PARK	Cabin Days Occupied	Cabin Oc- cupants	Group Camps	Tents and Trailers	Fisher- men	Pic- nickers	Swimmers	Out-of- State Cars	Total Cars	Total Visitors
Aiken	48	228	...	863	1,364	43,839	4,916	644	13,022	52,124
Andrew Jackson	...	...	...	...	...	3,113	...	1,114	2,654	9,368
Barnwell	...	...	...	633	376	15,829	3,044	220	6,215	28,514
Cheraw	331	2,487	6,911	5,822	6,050	46,417	39,706	4,204	19,227	98,850
Campbell Lake	...	...	...	...	535	5,139	3,072	354	2,342	11,540
Chester	...	...	...	196	353	5,251	...	359	3,844	15,376
Croft	...	...	...	...	...	...	...	...	...	...
Edisto	...	...	...	...	...	...	...	...	...	...
Givhans Ferry	87	836	...	1,683	...	14,156	6,250	...	5,688	20,814
Greenwood	...	...	...	8,399	5,030	37,708	3,944	1,330	21,827	105,033
Hunting Island	167	974	...	10,546	8,245	38,340	46,845	6,680	36,640	148,720
Huntington Beach	...	...	...	...	3,601	7,726	8,557	1,333	12,567	63,116
Kings Mountain	...	...	12,437	6,090	315	28,286	8,596	15,957	20,100	95,443
Lee	8	37	...	353	1,025	3,760	3,875	173	2,575	10,300
Little Pee Dee	...	...	...	...	...	...	...	...	...	...
Myrtle Beach	328	1,968	...	2,133	1,075	11,635	7,129	855	10,515	29,820
Oconee	1,051	6,312	...	56,187	9,588	35,050	...	41,585	124,065	501,940
Old Dorchester	...	...	...	5,356	280	11,982	21,942	327	11,391	42,546
Paris Mountain	...	...	...	...	...	...	...	...	...	...
Pleasant Ridge	24	164	2,158	1,104	442	48,706	12,898	4,082	14,902	61,951
Poinsett	85	596	3,577	62	219	5,747	979	141	2,175	93,852
Mill Creek	...	...	...	1,531	222	39,505	10,875	2,078	11,643	57,445
Rivers Bridge	...	...	3,243	...	302	18,277	11,723	133	4,749	32,887
Rose Hill	...	...	...	1,413	378	11,578	8,549	386	5,374	23,888
Santee	94	564	...	2,777	2,772	13,344	8,096	1,598	7,337	38,788
Sesquicentennial	...	...	380	6,364	494	72,530	42,573	12,669	40,359	165,278
Table Rock	779	5,052	...	7,675	1,114	53,716	27,020	2,662	29,357	115,274
Colleton Wayside	...	...	...	216	...	8,920	...	2,551	4,127	14,230
TOTALS	3,002	19,218	28,706	119,403	43,780	580,604	280,589	103,074	435,232	1,846,016

Forest Management

The forest management program has remained at about the same level of operation for the past five years with the addition of only one man during the five-year period. The major emphasis of the Commission's management program was directed toward assisting small private owners in the management of their woodland properties. The lack of forest management on these properties remains the No. 1 forestry problem in South Carolina.

The 1957 Forest Survey shows 77 percent of South Carolina's woodland owned by small private landowners; public ownership was 9 percent and industry ownership 14 percent.

Technical forestry personnel of the State Commission of Forestry offer forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to improve the stand, maintain it in a productive condition, harvest timber products or any reforestation work necessary on idle or understocked areas. Also included are recommendations for protection from fire, insects and diseases.

During 1963-64 the Commission had a total of 25 men devoting full time to the forest management program, including the small watershed activities. These 25 men assisted 1,906 landowners with primary forest management plans and handled 1,923 requests for the Agricultural Stabilization and Conservation Service. One hundred thirty-six field inspections of Conservation Reserve plantings were made. These men also marked 454 tracts covering 11,355 acres, amounting to 13,397,543 board feet and 11,446 cords. There were 9 active watershed projects on which critical area planting and gully control work was carried out.

The personnel were just able to keep up with requests from landowners for forest management assistance. In some areas requests could not be handled for two to four weeks after being received.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowners to employ a private consulting forester. Commission foresters

also work closely with industry foresters who give direct assistance to landowners.

Landowners continue to receive reasonably good prices for selectively marked sawtimber and pulpwood. The demand for all forest products was steady and prices remained firm.

The southern pine beetle epidemic which killed an estimated one hundred million board feet of timber in 1962 subsided and remained at an endemic level; however, a few hot spots remain and control efforts and surveillance are being maintained.

The Commission continued to work with Clemson College on a number of research studies. No new projects were undertaken.

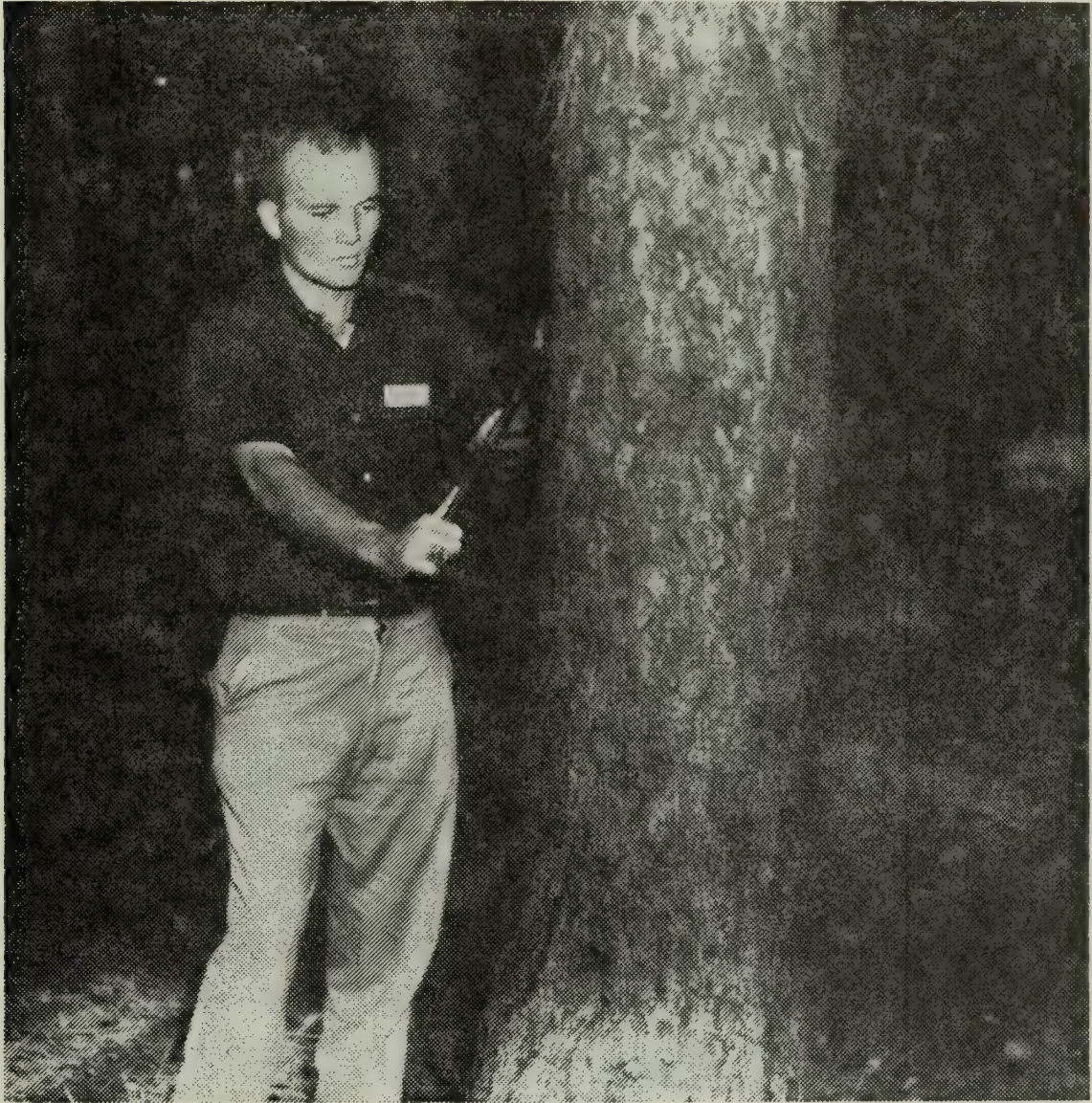
Working agreements were completed with all of the state's Soil Conservation Districts.

The Management Branch continued to train qualified rangers on some non-fire jobs such as insect and disease control activities and some phases of the A.S.C. Program. One additional county, Edgefield, employed a technical forester as Forester-Ranger. Chester County already had employed a forester. This ranger handled not only fire protection work but the forest management assistance program for the county. It is expected that two more counties will employ technical men to administer the fire protection program and to handle the management assistance work in those counties. These replacements are added as certain ranger jobs become vacant due to resignations, retirement, etc.

The State Commission of Forestry continued to operate four state forests. Combined area of these state forests represents about one percent of the total forest area of the state. Experimental and demonstration work and all forms of forest management activities were continued on these forests. Approximately 12 percent of the total land area in the state forests is still unproductive and major emphasis in management continues to be directed toward reforestation of these non-productive areas. The special program to speed up rehabilitation of unproductive scrub oak lands on the state forests continued to make good progress. Almost 30,000 acres have been cleared and reforested since the program was authorized four years ago. All of this work is accomplished with receipts from state forest timber sales, rentals, etc.

MANAGEMENT ASSISTANCE

The 25 man-years of forest management technical time of field foresters was directed toward assisting private landowners with their woodland management problems. The three Clemson College Extension Foresters assisted in this program, primarily with promotional and technical effort.



An important work of the Forestry Commission is service to private landowners as foresters make on-the-ground check of woodland areas and prepare management plans for the owners.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, insect and disease control and protection and reforestation measures needed. No charge is made for this service.

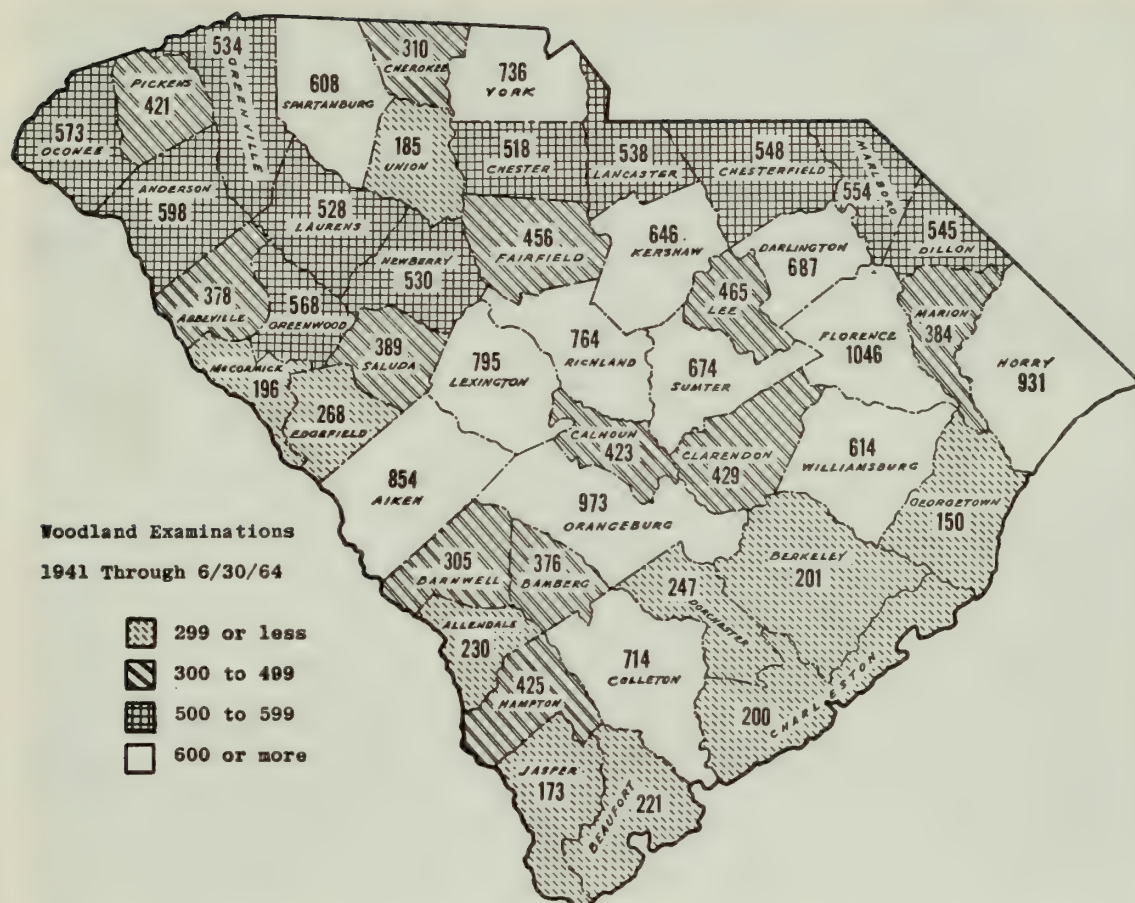
Where cutting of timber is recommended a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is 75 cents per thousand board feet and 25 cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seed-bed preparation, control of "brown spot" disease of longleaf pine and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis with the landowner of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and District Office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,500 telephone calls regarding insect and disease control and made more than 500 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

During the year, Commission foresters made 1,906 examinations on 210,206 acres of forest land, and selectively marked 13,397,543 board feet and 11,446 cords for 454 landowners on 11,355 acres of forest land.

Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to control the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees. This cull tree removal program is probably the largest single forest management problem facing South Carolina woodland owners.



Field foresters of the Commission are responsible for checking all areas where landowners request forest practices to be carried out on their property under the Agricultural Conservation Program. In 1963 a total of 1,624 landowners accomplished one or more forestry practices under the Agricultural Conservation Program. Field checks were required and made by Commission field foresters on 1,923 of these properties.

Commission foresters were able to service requests for assistance with not more than about one month's delay on any requests. Most projects had one to four weeks work scheduled ahead. There was a slight decrease in ACP requests which allowed the foresters to keep up with the work a little more closely than they had in the past.

CONSULTING FORESTER ACTIVITY

Commission and Extension foresters continued to follow the practice of referring all larger jobs to consulting and industry foresters wherever practical. Our records show 217 jobs referred to consulting foresters and 11 jobs referred to industry foresters during the year where properties were examined by Commission or Extension personnel. It is estimated that another 125 jobs



The use of fenuron pellets for clearing land was demonstrated to consulting foresters and Commission foresters in a cooperative training program.

were referred to consulting foresters through contact with Commission and Extension foresters but where no field work was done by Commission personnel.

The Commission again assisted consulting foresters to arrange their annual training school.

Sawtimber and Pulpwood Stumpage Prices for South Carolina Five-Year Period*

Fiscal Year	Weighted Average Stumpage Price Per M Board Feet	Weighted Average Stumpage price Per Standard Cord
1959-60 -----	39.22	6.76
1960-61 -----	36.93	6.37
1961-62 -----	33.89	6.43
1962-63 -----	32.56	6.24
1963-64 -----	32.05	6.60

*Sales of timber worked by Commission Foresters on private property.

Sawtimber and pulpwood prices remained steady during the year. Prices and demand were more firm than any time

since 1957. More hardwood demand was evident for both sawtimber, veneer and pulpwood. Exact figures are not available on sawtimber production; however, the estimated production figure is up from 1962.

There was no appreciable expansion in sawmills in the state during 1963-64. Some existing mills made improvements both on quality and quantity of manufactured items. The use of slabs and other sawmill residues for pulpwood chips continued to increase, partially offsetting the decrease in roundwood production.

A new pulp mill, South Carolina Industries, Inc., began production in early 1964. This is expected to increase the consumption of pulpwood in the state by approximately 15%.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired full time or part time foresters.

The pulp and paper companies continued to furnish the services of their foresters to assist landowners with proper thinning of pulpwood. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

Commission foresters checked in the field approximately 500 properties for insect and disease damage. Recommendations were given the owners regarding treatments necessary to control or check the spread of the diseases or insects. More than 1500 phone calls were answered regarding insect or disease where no field check was necessary.

SOUTHERN PINE BEETLE CONTROL ACTIVITIES

The 1961 to 1963 southern pine beetle epidemic in the Piedmont collapsed during 1963. A survey during June, 1963, indicated an insect population 20% of June 1962. Another survey in September indicated a further decline in the insect population. This latter survey showed conditions to be the best in the last four years.



The Southern Pine Beetle epidemic which killed thousands of trees in the piedmont during the years of 1961 to 1963 subsided during the past year.

In Berkeley and Charleston Counties, largely on the Francis Marion National Forest, the southern pine beetle became epidemic. These insects continued to be aggressive until late winter and early spring when a sharp decline was noted. June surveys indicate that the epidemic may have collapsed.

During the year Commission foresters advised landowners to salvage beetle infested timber, but no intensive program was

necessary. The U. S. Forest Service conducted an intensive beetle control program on public lands in Berkeley, Charleston, Oconee and Union Counties. Most of their program ended during the winter months.

COOPERATIVE FOREST MANAGEMENT

During the year 22 cooperative forest management projects were operated in the state. The total technical man-years devoted to forest management activities, including Cooperative Forest Management, Agricultural Stabilization funds, Conservation Reserve Program and Watershed Program was 24.8.

WATERSHED PROJECTS

A program to control water on the small watersheds and to protect from overflow the bottomlands along the smaller streams was initiated some years ago through Public Law 566. U.S. Forest Service has transferred its responsibilities to the S. C. State Commission of Forestry through an agreement. There are eleven Public Law 566 projects in operation in the state and the Pilot Watershed Project is being continued.

Preliminary examinations have been made on 26 separate areas to determine the feasibility of beginning new watershed improvement works on these areas. A description of some of the activities accomplished on the nine areas of operation follows:

TWELVE MILE CREEK PILOT WATERSHED

The Pilot Watershed on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the U. S. Forest Service and the Soil Conservation Service. A total of 60,500 seedlings were planted on 81 acres of badly eroded and gullied land within the project boundaries (includes some replanting). A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover can be established. A total of 38 woodland examinations and plans were made covering 1,541 acres for landowners on the project. Many tracts were marked for pulpwood thinning by pulpwood company foresters with the project forester checking the work. In addition, recommendations for planting, brush control, insect and disease control, and other measures needed on woodland areas

were given to a number of landowners. A total of 4,043 acres have been planted on critical areas in this project.

CONEROSS CREEK WATERSHED PROJECT

The Coneross Creek Project located just west of Walhalla in Oconee County, completed its seventh year's operation. A total of 113,000 trees were planted on 143 acres. A total of 38 land examinations were made covering 1,050 acres on the watershed area. With this year's planting, a total of 2,417 acres of critical area has been planted to trees.

BRUSHY CREEK WATERSHED PROJECT

The Brushy Creek Watershed, a 5-year program covering 23,512 acres has been under treatment since February 1959. Loblolly pines have been planted for flood prevention on 559 acres, totalling 494,800 trees. Watershed protection planting totals 352 acres and 350,300 trees. As the project is nearing termination most of the needed treatment measures have been carried out. Tree planting upon completion of the project will be less than original work plan estimates for several reasons. Land originally classed as critical areas and needing watershed protection has been diverted to pasture or agricultural crops, and placed in cover under the Soil Bank program.

Woodland management assistance was given to 10 landowners on 264 acres.

WATEREE CREEK WATERSHED PROJECT

This was the fifth year of operation for this watershed project. Most of the planned flood prevention work has been accomplished. 52,500 trees were planted on 59 acres of critical area. Twelve acres were treated with brush dams and love grass. The total flood prevention planting is now 299 acres. The grand total watershed protection planting for the past five years is 458 acres.

HUFF CREEK WATERSHED PROJECT

The Huff Creek Watershed covering 21,787 acres has been under active treatment for four years. Loblolly pines totalling 132,500 have been planted on 135.8 acres of critical areas for

flood prevention by the S. C. State Commission of Forestry. A total of 1,325,500 pines have been planted on 1,326 open acres by landowners for watershed protection. Landowners have carried out hydrologic stand improvement on 218 acres. A Pilot Forest sponsored by a pulp and paper company has been under management for over three years and serves as a good example of proper woodland practices.

DUNCAN CREEK WATERSHED PROJECT

This was the second year's operation for this project. 84,800 loblolly pine seedlings were planted on 97.3 acres of critically eroding land. Check dams and love grass were constructed on 35 acres. Other tree planting amounted to 180 acres, bringing the total planted during the two years' operation to 297.7 acres.

THICKETY CREEK WATERSHED PROJECT

This was the second year of operation for this project. Critical area planting was accomplished on 159 acres. Other planting amounted to 262 acres. Check dams, love grass planting and other erosion control work was carried out on 178 acres. A total of 41 farms have had work done totalling 243 acres. Thirty-three woodland examinations and plans were made covering 1,383 acres of woodland.

HILLS CREEK WATERSHED

This was the second year's operation for this project. Eighteen acres of critical area was treated and planted to trees. Forty-seven acres were planted to trees by the landowners. A total of eight woodland examinations and plans were prepared covering 1,140 acres. Only one or two acres remain to be treated on this project.

BIG CREEK WATERSHED PROJECT

This was the first year's operation for this project. A total of 7.7 acres was planted to trees and four woodland examinations made covering 118 acres. This project will require very little critical area work.

BROADMOUTH CREEK; BEAVERDAM CREEK; LYNCHEs LAKE-CAMP BRANCH PROJECTS

These three watershed project areas have no critical area tree planting and gully control work needed. There is a need for intensified woodland management activities and Commission foresters are doing this work.

NURSERIES

Four tree nurseries were operated during the year, producing and distributing to landowners 51,445,597 seedlings for planting during the 1963-64 planting season. An additional 10,978,000 seedlings were either produced or brought into the state by others. The cost of seedlings grown at Commission nurseries was \$4.00 per thousand f.o.b. nursery or \$5.00 if the seedlings were shipped to the landowners.

The demand for seedlings decreased slightly during the year with a total reduction in seedlings planted from all sources of 1,750,000. It is expected that seedling sales will remain at about the present level. Since 1928, a period of some 36 years, one billion three hundred million (1,300,574,851) forest tree seedlings have been planted in South Carolina.

A forest survey of South Carolina made during 1958 indicates that over five million acres will have to be planted if they are to be productive. This land if planted could bring returns to South Carolina landowners in excess of 30 million dollars per year.

FOREST TREE NURSERY ACTIVITIES

The four forest tree nurseries operated by the Commission are:

Horace L. Tighman (near Wedgefield in Sumter County); Piedmont (near Sunset in Pickens County); Coastal (near St. George in Dorchester County); and Ridge (near Trenton in Edgefield County).

Distribution of Seedlings:

During the year a total of 62,423,597 forest tree seedlings were distributed throughout the state. Of this total 51,445,597 were produced in the four state nurseries.

Loblolly	23,312,510
Slash Pine	24,155,440
Longleaf	2,808,152
Red Cedar	308,050
Yellow Poplar	227,550
White Pine	356,580
Miscellaneous Species	277,315
Total	51,445,597

In addition to the above seedlings distributed by Commission nurseries, 10,978,000 seedlings were brought into the state or produced in the state by industry nurseries.

Tables 9 and 10 in the appendix are a record of seedlings distributed by counties and class of ownership. Table 11 shows the total acreage planted by counties and acres in need of planting.

Forest Tree Seed Collection:

Each year the Commission collects cones to obtain seed for tree seedling production. The field offices of the Forestry Commission locate private collectors in good seed producing areas to obtain the quotas which are set. This year cones and seed were collected as follows: Longleaf Pine 458.5 bushels; Slash Pine 482.0 bushels; Loblolly Pine 467.0 bushels; Yellow Poplar 4,816.0 pounds; Red Cedar 1,609.7 pounds; Black Walnut 50.0 bushels; White Oak 40.9 pounds.

The seed extractory was operated for the seventh year with continued good results. The average cost of seed to the state since the operation of the seed extractory is \$1.69 per pound compared to \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Seedling Survival Examination:

After seedlings are outplanted one year by landowners, approximately 10% of the seedlings planted in each county are sampled to determine the over-all state survival rate. Through these examinations, the Forestry Commission can determine steps to take to eliminate future plantation failures on the part of the landowners. This year the over-all state seedling survival

rate was estimated at 66% compared to 68% for the previous year.

Research:

The nurseries cooperated this year with Clemson College on Research studies, some of which were initiated this year and some in previous years. Not as much emphasis was given research as in previous years since seedling production has decreased and sufficient funds and personnel were not available. Several research projects which have been completed in cooperation with Clemson College have been of great assistance in tree seedling production.

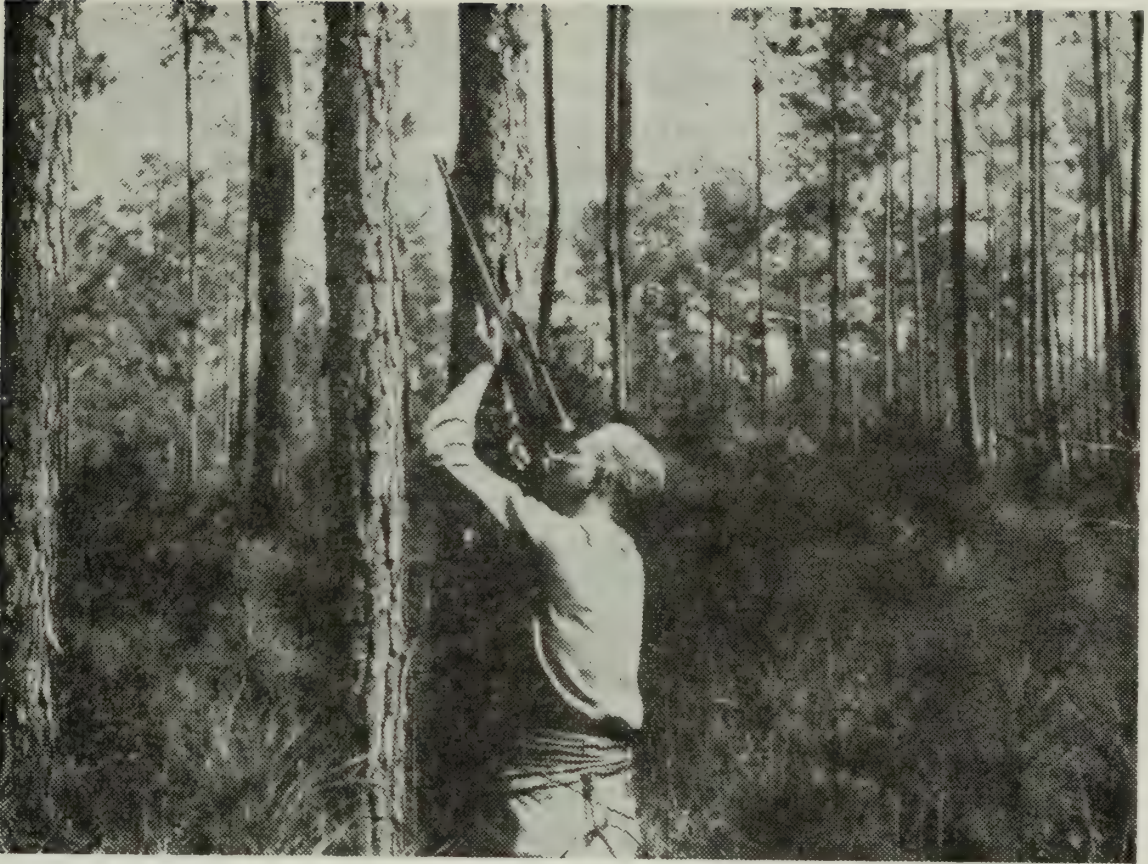
Forest Tree Improvement:

Increased emphasis was placed on a tree improvement program in order that approximately 150 acres of seed orchards can be completed as quickly as possible. A total of 1,178 grafts have been planted in the Burnt Gin Seed Orchard with 528 being slash pine and 650 being loblolly pine. Of this total 1,100 plants were established during this fiscal year.

During March and April, 1964, 5,951 grafts were made at the four nurseries on rootstock in nursery seed beds and will be transplanted in the seed orchards.

It is planned to establish seed orchards for Coastal loblolly pine, Piedmont loblolly pine, Georgia slash pine and South Carolina slash pine. Each seed orchard will have 30 clones making a total of 120 clones for all orchards. At present, through a superior tree selection program and trades of superior trees with industries, 92 clones have been obtained. Seed orchards are being established on the Manchester State Forest, near the Horace L. Tilghman Nursery and on a part of the Coastal Nursery site.

The South Carolina Commission of Forestry continued as a member of the North Carolina State College—Industry Tree Improvement Program. Membership in this program makes available the services of forest geneticists, who provide the technical services which are necessary in a tree improvement program.



Scions are collected from superior trees by shooting or climbing and—



Grafted on nursery stock for transplanting in seed orchards for future seed production. Objective—superior seedlings in the future.

Anticipated 1964-65 Seedling Production:

Planned production of seedlings for the 1964-65 planting season is approximately 56 million. Species for distribution will include loblolly, slash, longleaf, shortleaf, white pine, Virginia pine, yellow poplar, black walnut and red cedar.

STATE FORESTS

The amount of state forest land remained the same as last year :

Cassatt State Forest	462 acres
Harbison State Forest	2,202 acres
Manchester State Forest	28,830 acres
Sand Hills State Forest	92,000 acres
<hr/>	
Total	123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective continues to be the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops to reduce the competition so that pine will survive and grow. Approximately 30,734 acres of scrub oak land have been cleared and replanted to pine since acquisition by the state. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.

The 1960 Legislature passed an act enabling the Commission to use receipts from state forests to speed up the reclamation of scrub oak lands. This program enabled the state to clear approximately 5,000 acres during 1960-61; 5,949 acres in 1961-62; 5,893 acres in 1962-63 and 6,163 acres in 1963-64.

DEMONSTRATIONS AND MEETINGS

Three large group meetings were held at the State Forests to show some of the results of research and experimental work.

In addition, a large number of individuals and small groups visited the areas.

PAYMENTS TO COUNTIES

Twenty-five percent of the gross receipts of all state forest operations are paid to the counties in lieu of taxes. This year's payment by counties was as follows:

Chesterfield (Sand Hills State Forest)	\$48,889.74
Sumter (Manchester State Forest)	33,817.85
Richland (Harbison State Forest)	5,261.25

In the past seven years the Forestry Commission has paid a total of \$306,885 to counties where state forest lands are located, as follows:

Chesterfield	\$217,438.20
Sumter	157,795.89
Richland	20,525.60
Kershaw	897.36

The forester who was employed to coordinate research and experimental work for the Commission was continued this year. Most of the Commission's research efforts were through cooperative studies with either Clemson College or Southeastern Forest Experiment Station. Some of the studies established and continued are listed below:

1. Comparison of growth on old fields versus clearings.
2. Furrowing for better survival.
3. Geographic seed source comparisons.
4. Study of eight spacings for slash pine.
5. A test of conifer species suitable for sandhill planting on cleared land and old fields.
6. Thinning study of slash pine.
7. Test of direct seeding slash pine.
8. Control of scrub oak by chemical means.
9. Test of species suitable for Christmas trees.
10. Test of direct seeding longleaf and slash pine.
11. Test of control of scrub oak with 2, 4, 5-T applied with mist blower.

12. Test of control of scrub oak with various chemicals applied with mist blower.
13. Test of control of scrub oak with Dybar (fenuron) pellets.

Detailed reports of activities on each of the state forests follow:

CASSATT STATE FOREST

The area comprising this forest lies about two and one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a fire tower and dwelling for the towerman were erected. Also, a small amount of pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained annually a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property.

All of this forest is now in production and only a small amount of timber stand improvement work is needed to maintain a good state of production.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires burned on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the 17 years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a substantial amount to the state treasury. This year 367,840 board feet of sawtimber and 294 cords of pulpwood were sold which brought in a total of \$20,945.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939

to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the Federal Government. Fee title to this property was received by the state on June 28, 1955. A survey was completed for approximately 85 percent of the boundary lines during the last five years. Approximately 10 percent of this forest is still in an unproductive state. It is on this area that the major silvicultural activities are being directed. Most of the old fields except those being farmed have been planted. The clearing of worthless scrub oak lands and planting to pine is proceeding rapidly and will be completed within the next two or three years.

Fish and Wildlife:

Hunting and fishing are handled by a cooperative agreement with the Sumter County Game and Fish Association, which issues permits for hunting and fishing, provides the services of a game warden to patrol the area, and handles the stocking of lakes with young fish where needed. State forest personnel plant wildlife food strips and patches, with the cost being paid by the Sumter County Game and Fish Association. Peas were planted on 300 acres for deer food and brown top millet was planted on 65 acres as dove and quail food.

Twenty-four tenants rented 706 acres of land for agricultural purposes during the year. Some of these tenants work part time on the forest.

In addition, 150 acres of newly-cleared scrub oak land were rented for one season to watermelon growers.

Tree Planting:

A total of 1,150,000 trees was planted on the forest during the year, consisting of 1,000,000 slash, 100,000 longleaf and 50,000 sand and Virginia pine.

Forest Products Sold and Other Receipts, 1963-64:

Sawtimber - 2,077,985 board feet.....	\$ 80,033.86
Pulpwood and Posts - 6,807 cords	49,313.35
Rentals, Leases and Miscellaneous	5,924.20
<hr/>	
Total Receipts	\$135,271.41

Silvicultural Practices:

With the aid of funds made available by the 1960 Legislature, the major job of reclaiming scrub oak lands proceeded on schedule. 933 acres were cleared by root raking and 1,198 acres were plowed. Of the 1,198 acres plowed, 180 were rented for watermelon production. The total amount cleared of scrub oak and planted to pine on this forest is now 6,826 acres. 120 acres were treated with mist blowing, 60 acres treated for hardwood control by other methods and 125 acres prescribe burned.

Monthly checks were made for insect and disease damage. Treatment of slash pine stumps left in thinning operations with creosote as a control measure to prevent the spread of *Fomes* root rot was discontinued. Research in cooperation with the Southeastern Forest Experiment Station is being continued.

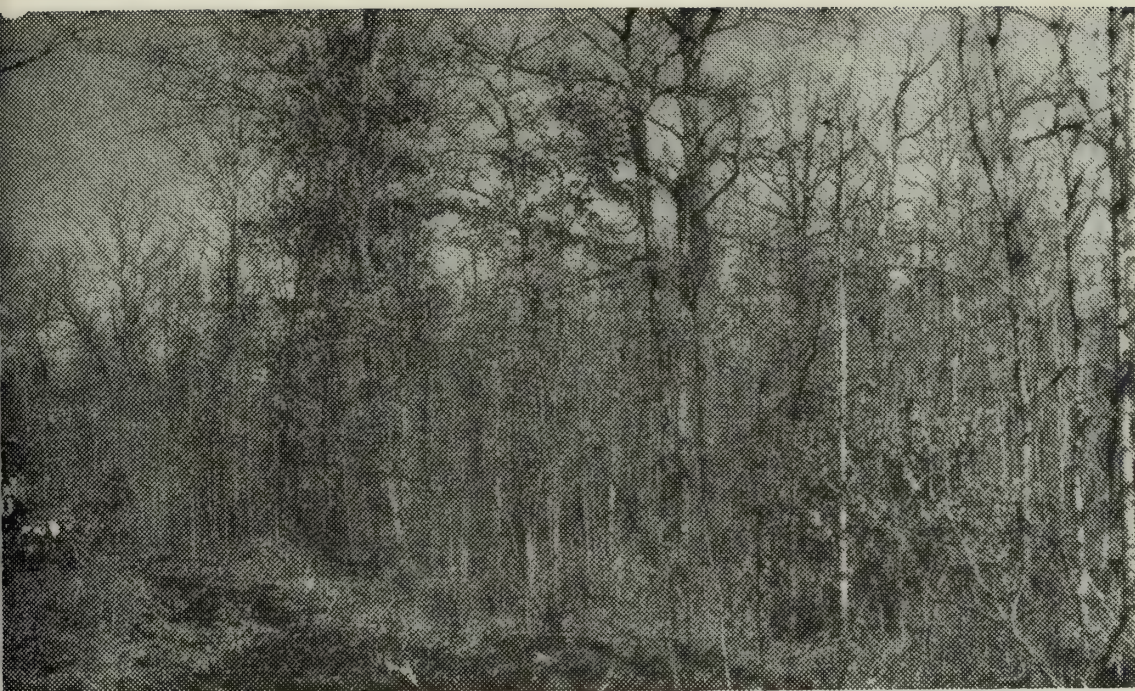
Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester State Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, damage will be confined to a few hundred acres. The lease was to expire on July 30, 1962, but was extended through 1964. The State Commission of Forestry is being paid \$3,074 per year for this lease.

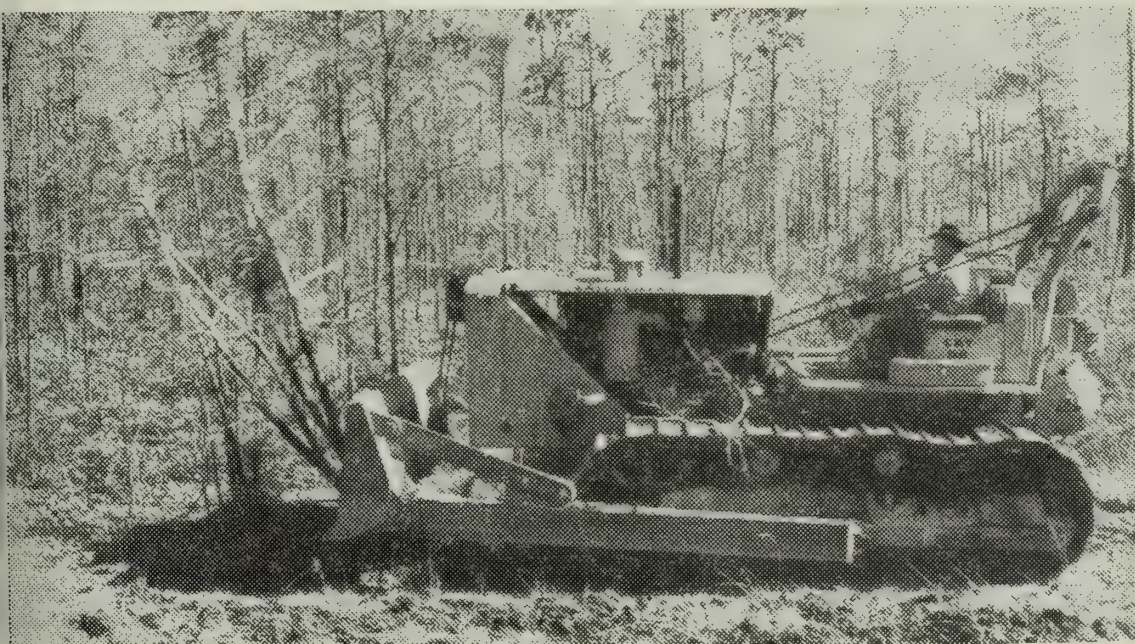
SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a wildlife refuge, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the federal government on a 95-year lease.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities have consisted of tree planting, fire protection, and other practices aimed at building up the productivity of the land and increasing the forest stand. Almost one-fifth of the forest remains in scrub oak. The reclamation of this scrub oak land is the major silvicultural objective at the present.



Many areas like this—



have been cleared and—



Planted to pines as many acres of unproductive land have been placed in production on state forests.

Tree Planting:

Most of the longleaf was planted on the Fish and Wildlife Refuge portion of the property. Most areas were machine planted, although some hand planting was necessary in rough cleared areas and on experimental plots. The total planted on the forest during 1963-64 was 4,171,000 seedlings (2,405,000 slash pine; 1,711,000 long leaf pine; 55,000 miscellaneous species).

The total planted on the forest since its establishment amounts to 27,788,000 seedlings. Approximately 26,000 acres have been successfully re-established to pine.

Forest receipts for the year are listed below:

Forest products	\$188,326.70
Watermelon land rentals	6,312.25
Other agricultural lands and miscellaneous receipts	920.00
	<hr/>
Totals	\$195,558.95

Recreation:

The Sugar Loaf Mountain recreation area continued to receive heavy use during the year. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and latrines. The fifteen Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing but no swimming is allowed.

The State Park Division continued to maintain Campbell Lake State Park, which attracted 11,540 visitors during the year.

Fish and Wildlife:

Dove hunting only was allowed on the state forest portion of the Sand Hills State Forest. Seven hundred forty-seven persons participated in seven dove hunts. This was the second year that hunting has been permitted on the forest. An effort is being made to build up wildlife stocking in doves, quail, deer, turkey and other native game, and as soon as it appears that sufficient populations of any of these species are available,

organized hunting will be allowed on the state forest portion of the property. Rye was planted on 120 acres and brown top millet on 54 acres.

Fishing is allowed in Sexton's Pond, Sugar Loaf Mountain Lake, and Campbell Lake.

Agricultural Lands:

Several tenants rent and farm agricultural land on the forest. All of the lands which were formerly cultivated and which were too poor to afford a living for the farmers have been abandoned and have been planted to pine trees.

Silvicultural Practices:

Under the program authorized by the Legislature to clear scrub oak areas and plant them to pine 5,170 acres were cleared. Not all of this cleared land was planted, since a part was rented to watermelon growers for one season. The clearing technique is the same as has been used in the past. A root rake is used to push the aerial portions of the scrub oak into windrows which are then burned; then the area is plowed with heavy discs. The total that has been cleared of scrub oak on this forest is now 23,908 acres. It is expected that approximately 5,000 acres will be cleared during 1964-65.

Timber stand improvement which released young pines from overtopping hardwoods was done on 180 acres.

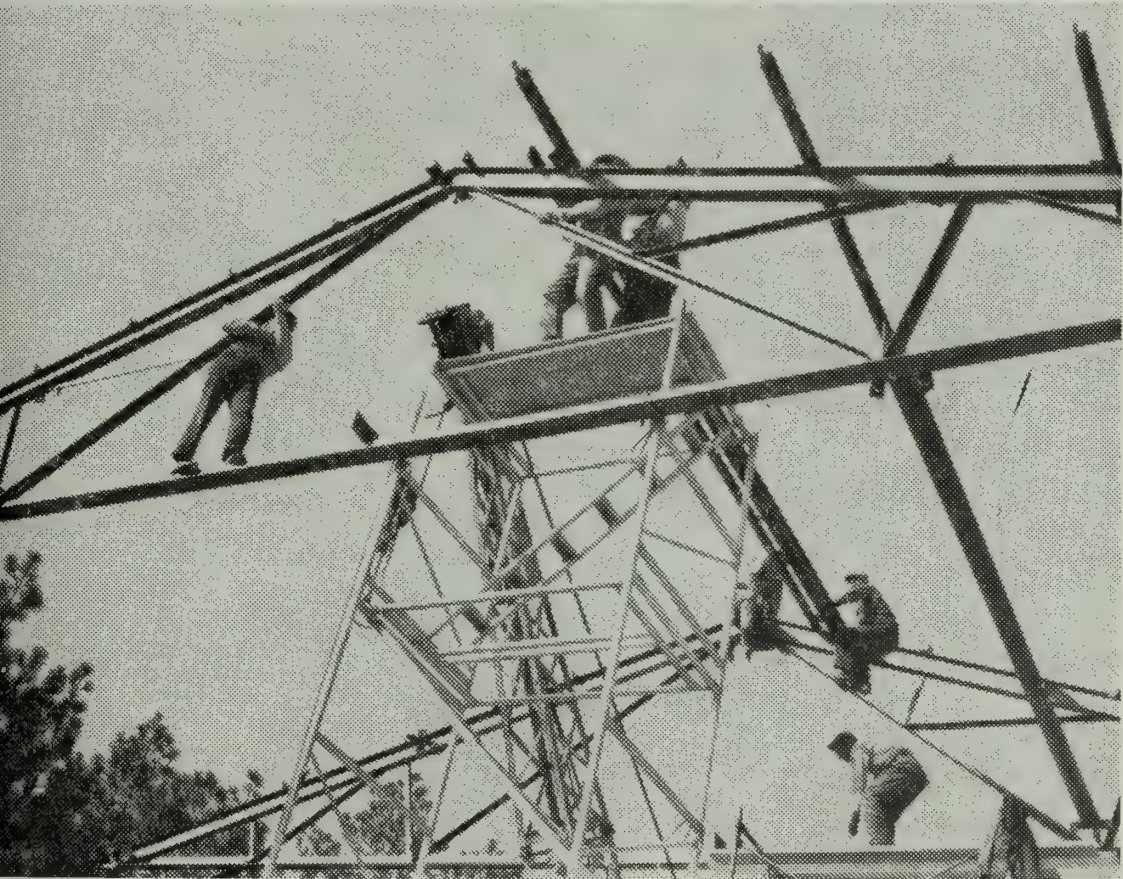
Forest Fire Protection

INTRODUCTION

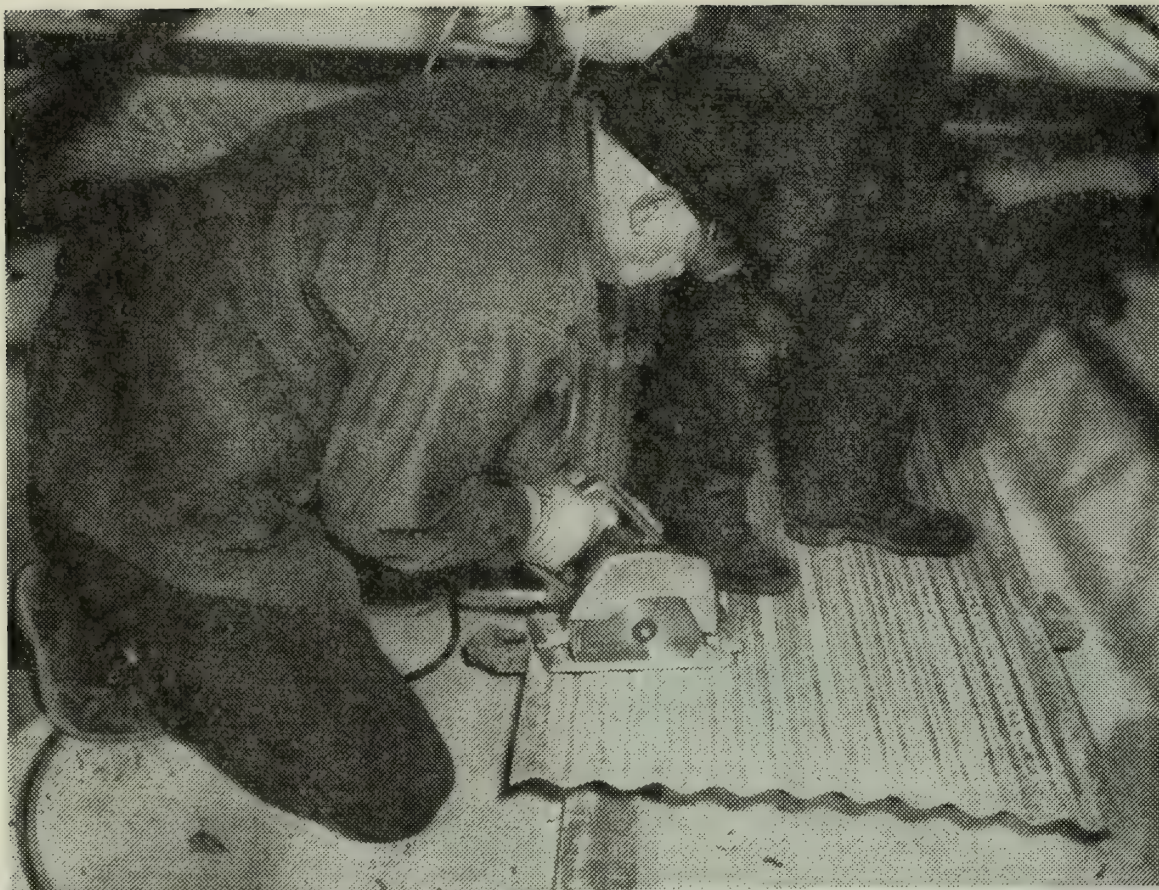
The Fire Control Branch of the S. C. State Commission of Forestry provides basic forest fire protection to all private timberland owners in the state. Cooperative fire protection assistance furnished each landowner is based on the theory that the landowner is primarily responsible for the prevention and control of fires on his property, and the Commission of Forestry cooperates with the individual whenever and wherever possible. The state is divided into seven forest service districts with a district forester at each district headquarters who is responsible for all fire protection activities within his district. District headquarters are located at Camden, Florence, Kingstree, Newberry, Orangeburg, Spartanburg and Walterboro. The districts are divided into county units—all of which have fire control organizations and a limited amount of suppression equipment, thereby enabling them to work directly with private landowners in the prevention and control of fires on private holdings. Many landowners throughout the state maintain their own fire suppression hand tools and mechanized equipment with sufficient personnel to handle wild fires on their property. This total state and private forest area protected in South Carolina is 11,175,000 acres. In addition to the above total, the U. S. Forest Service protects 587,221 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

County Units:

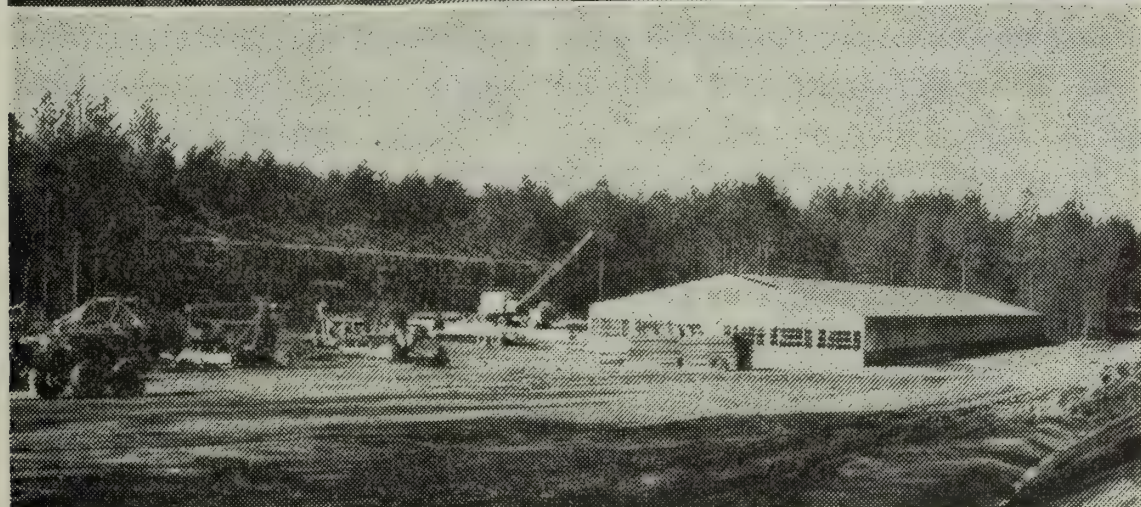
Each county unit organization consists of a unit ranger, wardens, lookout towermen, and tractor operators. The number of wardens, towermen, and tractor operators in each county varies according to the size and forest acreage of the county and in some cases with particular problems which may exist. The total county unit personnel in South Carolina consists of 46 rangers, 134 wardens, 69 tractor operators, and 138 lookout towermen.



100 yards of concrete flow as floors prior to the erection of the new Operation Center of the Commission of Forestry on Harbison State Forest.



Structural steel and materials salvaged from excess property released at the Savannah River Project of the Atomic Energy Commission provide a major part of the 50,000 square feet of shop and storage space now being used.



Personnel of the Commission of Forestry, drawn from every part of the state, put their varied talents to work in constructing the Center at a considerable saving to the taxpayers of South Carolina.

County Forestry Boards:

The State Forest Fire Protection Act of 1945 provides for a county forestry board consisting of five members to be appointed by the Commission of Forestry upon the recommendation of the majority of the County Legislative Delegation. The individuals who serve on the forestry boards in each county are appointed for a five-year term. An annual meeting is held each year

to discuss and review forest fire protection activities within the county. All board members are kept informed of the various activities of the Commission of Forestry and are contacted periodically in connection with the work program. Many of the accomplishments in forest fire control are attributed directly to the efforts and support of the individual board members throughout the state.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards met for the first time on December 9, 1952, and is composed of one delegate from each county board elected by the membership of the board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities. The committee meets annually to discuss the proposed forestry program for the coming fiscal year and to consider the budget request which is submitted to the State Legislature. Individual committee members are responsible for familiarizing themselves with local forestry conditions and activities within their counties and making recommendations to the Commission of Forestry in an endeavor to further the overall forestry program in South Carolina.

State Forests and Parks:

Approximately 172,127 acres are contained in the 30 state park areas and 4 state forests of South Carolina. The individual park superintendents and state forest directors are responsible for protection from wild fires within their own boundaries on a cooperative basis with the Branch of Forest Fire Control. Fire plans, including recommendations for protection of these state-owned areas, have been prepared and furnished each superintendent.

Two medium suppression units are now stationed on the state forests. One unit is at Manchester State Forest in Sumter County and the other is in Chesterfield County on the Sand Hills State Forest.

Cooperative Agreements with U. S. Forest Service:

The Commisison of Forestry and the U. S. Forest Service maintain a formal agreement to assist one another with the detection and suppression of fires which occur along the immediate vicinity of the national forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

Constant training is required to get the many and varied activities of the Fire Control Branch accomplished efficiently and economically. Training is designed to fit the individual and his job responsibility, with special emphasis being given to local and on-the-job training. Special group training is carried on periodically including such subjects as law enforcement, fire behavior, large fire organization, damage appraisal, and civil defense. Most training in the past year continued to be individual and on-the-job instruction. Special training during 1963-64 included a three-day law enforcement school at Florence and a two-day forest fire behavior and fire weather school held at Columbia.

Inspections:

Each year, complete fire control inspections are carried out in the counties of the state in an effort to discover and correct weak points in the fire control program. All phases of fire control activities are covered in these inspections which are conducted by Central Office and District Office personnel.

Inspections are also constantly being carried out on the fire control fleet of mechanized equipment. Emphasis is placed on preventive maintenance to keep the repair jobs small and repair costs to a minimum.

Numerous inspections are made on equipment during the year by traveling mechanics, district mechanics, and by the equipment operators themselves.

Law Enforcement:

Law enforcement personnel of the Forestry Commission were given additional training during the year to further intensify the law enforcement program in the state. All commissioned

personnel and personnel to be commissioned attended a three-day school held at Florence in October. Instruction was carried out by the Attorney General's office, the S. C. Law Enforcement Division, and the Federal Bureau of Investigation. Subject matter included laws of arrest, laws of searches and seizures, basic rules of evidence, court room procedure, and firearms training. There are at present 56 persons commissioned to enforce the forest fire laws of the state.

Forestry Commission investigators had excellent cooperation and assistance from the S. C. Law Enforcement Division and county law enforcement officers during the year on investigation and prosecution of forest fire law violators.

A total of 222 prosecutions and 207 convictions were obtained for violations of the various forest fire laws during the year. Of this number, 24 of the prosecutions and 22 of the convictions were for violations of the burning permit and/or notification laws; 192 prosecutions and 179 convictions were for violations of the careless and negligent law; and 6 of the prosecutions and 6 convictions were for the violation of the willful and malicious law.

The main causes of forest fires were careless smokers, accounting for 1,048 fires; careless brush and debris burning, 938 fires; and incendiary or deliberate burning, 838 fires. These three causes were responsible for 2,824 of the 3,817 fires that burned during the year.

Fire Plans:

Each county unit organization has a fire control plan which guides and controls fire suppression activities. The plans are kept current and revised to conform with changing conditions and latest operating procedures.

Plans similar to the fire control plans used in county units are prepared for landowners throughout the state who desire to maintain adequate fire protection on their timberland ownerships.

Forestry Study Committee

The 1955 session of the General Assembly provided for the appointment of a Legislative Forestry Study Committee which has been continued through the years. This committee, which

originally was appointed to study forest fire conditions in the state, has been expanded to cover the entire field of forestry. Each year, the committee schedules a series of meetings and hearings and formulates many recommendations which are consolidated in an annual report to the General Assembly. The General Assembly has extended the Legislative Forestry Study Committee for the fiscal year 1964-65.

Southern States Forest Fire Control Conference:

The twenty-fifth Southern States Forest Fire Control Conference was held at Asheville, North Carolina, on May 26, 27 and 28, 1964. These annual meetings are designed to allow exchange of fire control ideas between states and to promote efficiency in fire protection activities.

Southeastern States Forest Fire Compact Commission:

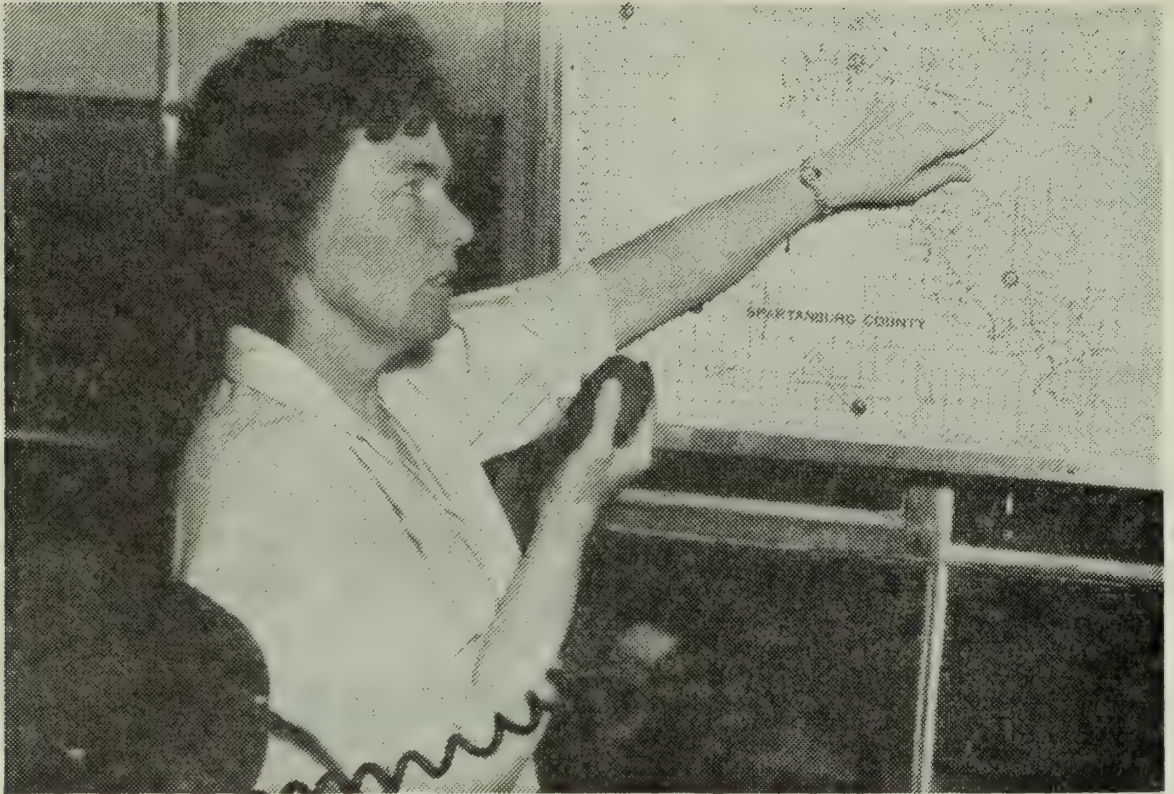
The ten Southeastern States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, Virginia, and West Virginia make up the Southeastern States Forest Fire Compact Commission.

The membership of this Commission from each state is comprised of a Compact Administrator (the State Forester) and a four-member advisory committee. The South Carolina membership includes Senator L. Marion Gressette of Calhoun County, Representative Charles G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County, and R. R. Rigby of Columbia.

Civil Defense:

The Commission of Forestry cooperates in relaying messages to and from State Civil Defense Headquarters and local Civil Defense chairmen during any emergency or disaster which may hit the state, as well as during Civil Defense alerts which may be scheduled from time to time. All messages are relayed over the Commission's statewide two-way radio network.

The Forestry Commission also cooperates with the Civil Defense Agency in monitoring radiological fallout. One station is set up in each county at a tower or other Commission facility and is equipped with instruments for measuring radioactive fallout. Four persons from each county have been trained to use these monitoring instruments.



The "eyes" of the state's forest fire protection forces remained vigilant as operators manned 138 lookout towers. "Crossed out" smokes were reported to the local ranger or warden who proceeded to find out if suppression efforts were necessary.

Lookout Towers:

There are 138 forest fire lookout towers in South Carolina which are operated by the S. C. State Forestry Commission. The U. S. Forest Service operates 19 lookout towers on the Sumter and Francis Marion National Forests in addition to the state-operated towers. State and federal towermen cooperate with each other in spotting and locating fires which occur within their range of visibility.

Tower Unit Buildings:

During the 1963-64 fiscal year, no major improvements were installed at the towersites. Routine maintenance jobs were carried out at all towers during the year.

ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

138 Lookout Tower Units.....	\$2,947,503
46 Fire Danger Measurment Stations.....	3,450
100 Miles Telephone Line.....	30,000
Central Radio Shop and Map Laboratory.....	25,000
Central Repair Shop and Warehouse System.....	286,480
7 District Repair Shops.....	35,000

Radio:

4 Remote Control Base Stations		
2 frequency-250 watt -----	@ \$3,000	\$ 12,000
1 Remote Control Base Station		
2 frequency-100 watt -----		1,600
11 Remote Control Base Stations		
2 frequency-60 watt -----	@ 1,400	15,400
5 Mobile Relay Stations		
60 watt -----	@ 1,400	7,000
1 Relay Station		
30 watt -----		1,200
106 Local Control Base Stations		
2 frequency-10, 25, 30, 60 watt -----	@ 560	59,300
77 Local Control Base Stations		
1 frequency-10, 25, 30, 60 watt -----	@ 540	41,580
79 Mobile Units		
1 frequency-10, 25, 30 watt -----	@ 520	41,080
204 Mobile Units		
2 frequency-10, 25, 30, 60 watt -----	@ 550	112,200
10 Mobile Units (Transistorized)		
(Mobile Relay), 80 watt -----	@ 810	8,100
46 Mobile Units (Transistorized)		
2 frequency-80 watt -----	@ 650	29,900
31 Mobile Units (Transistorized)		
2 frequency-15 watt -----	@ 500	15,500
6 Portable Units (Transistorized)		
High Band - 1 frequency-5 watt -----	@ 750	4,500
2 Portable Units (Transistorized)		
Low Band - frequency-8 watt -----	@ 500	1,000
1 Portable Unit (Transistorized)		
High Band - 1 frequency-3 watt -----		750
2 Portable Units (Transistorized)		
High Band - 1 frequency-1.5 watt -----	@ 750	1,500
114 Auxiliary Receivers -----	@ 155	17,670
12 Radio Towers -----		33,400
14 Antennas - Gain (Base Station) -----	@ 195	2,630
		<hr/>
		\$ 406,310
TOTAL -----		\$3,693,733

Equipment:

Four additional medium suppression units, complete with truck and tractor, were added to the fire suppression fleet during the year. These four units were assigned to fire wardens in Greenville, Clarendon, Williamsburg, and Hampton Counties for operation. Ten new tractors were purchased as replacements for old worn out units during 1963-64. Five of the tractors bought during the year were the heavier 20-10 John Deere Crawler type. Fourteen old medium suppression unit transports were replaced with new trucks last fiscal year, and twelve new pickup trucks were purchased as replacements for worn out trucks being used by county rangers.

Three station wagons were replaced last year with new vehicles for use by radio technicians.

**INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT
AND ESTIMATED REPLACEMENT VALUE**

June 30, 1964

2,391 Back Pack Pumps.....	\$ 42,400
5,014 Fire Rakes	17,220
2,669 Fire Swatters.....	10,656
393 Backfire Torches.....	8,040
12 Heavy Suppression Tractor-Plow Units w/Transports	272,000
3 Heavy Dozers.....	80,000
1 Medium Suppression Tractor-Plow Unit w/Transport	20,800
80 Light Tractor-Plow Units w/Transports.....	626,450
3 Heavy Lowboy Truck-Transports.....	10,000
45 Ranger Pickup Trucks.....	78,750
1 1/4-ton Jeep	2,250
7 Sedan Delivery Trucks	14,000
2 2-ton Stakebody Trucks	7,650
16 1/2-ton Pickup Trucks	28,000
1 Mobile Field Headquarters Unit.....	3,200
1 Field Kitchen w/Power Supply Trailer & Water Truck	14,000
1 Supply Van	2,500
TOTAL	\$1,136,290

Equipment Maintenance Shop:

In March of 1964, the S. C. State Commission of Forestry moved its Central Fire Control equipment maintenance shops and warehouses from Sumter to 5500 Broad River Road, Columbia, S. C. Maintenance operations have been resumed at the new site. Heavy and specialized repairs are made to all fire control equipment at this Central Shop.

Two traveling mechanics, headquartering at the Central Repair Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the district mechanics and equipment operators, make such necessary repairs as they are equipped to handle. During the past year, the traveling mechanics made 402 complete field inspections of equipment and conducted 730 field repair jobs. Installations of fire-fighting equipment were made on 22 new trucks.

The Central Shop personnel made many repairs to automotive equipment owned by the Commission and made many items necessary for field use. Some of the work handled by the mechanical force is listed below.

Major repairs were made to 55 light tractors, 29 light trucks, 43 heavy trucks, 1 heavy plow, and one heavy trailer.



Many truck loads of equipment and supplies moved the Commission's Operation Center from Sumter to Columbia in March of 1964.

Many minor repairs were made to all types of equipment. A total of 22 canopies were made and installed on light tractors. One D-7 crane was converted to a heavy fire suppression unit for field use.

In addition to repair work, many items were adapted to field use or manufactured outright at the Central Shop. Work done included modifying or building equipment bodies, making booster tanks, radio boxes, and equipment racks. Repairing and putting into service surplus equipment is also done at the Central Repair Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. The facilities are used for warehousing certain materials and supplies necessary for the efficient operation of each of the forestry districts and by the mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district. The traveling mechanics who operate from the Central Repair Shop at Columbia also use the shops in assisting the local mechanics to more effectively keep all motorized equipment in good operating condition at all times and to make any necessary repairs which may be needed.

Columbia Radio Shop:

Since 1958, the Forestry Commission has maintained a Central Radio Communications Maintenance and Repair Shop at 241 Catawba Avenue in Columbia. All activities, including installations, maintenance, and repair of communications equipment by the radio technicians assigned to the outlying district repair shops, are administered from this central headquarters.

Radio:

To further extend the mobile communicating range, a program of mobile relay installations was begun with a mobile relay installed at Neeses, Florence and Lodge Towers. This will be extended to other areas of the state.

The frequency 31.90 mc. was replaced with 159.405 mc. in all Walterboro District dispatching towers and at the District Office to eliminate the interference inherent in the low band.

Updating of the radio system was continued with the installation of additional transistor radio units.

The five district radio shops and the Central Radio Shop in Columbia carried out a full program of maintenance and installations during the year.

Use of Aircraft in Fire Control:

Radio-equipped planes are used on a contrast basis when necessary to supplement the lookout towers. During periods of low visibility, towers cannot adequately cover their areas of responsibility and, without the use of airplanes, many fires would occur and burn for long periods of time undetected before being discovered and reported to the fire control organization. Rental aircraft are used to detect and check fires during periods of high occurrence, to direct ground suppression forces on large and troublesome fires, and to assist with law enforcement efforts in incendiary problem areas.

Fire Danger Measurement:

Fire danger measurement stations are located in each county of the state. Readings are taken at these stations twice daily and the information disseminated to all fire control personnel to keep them informed on potential conditions leading to high fire occurrence and difficulty of control. Fire control personnel use this fire danger information in planning daily work activities and degree of standby readiness. Class fire days are rated from 1 to 5, with 1 the lowest and 5 representing the highest degree of fire danger. During the past fiscal year, average records for the state indicate the following number of class fire days for each of the 5 major ratings: 164 Class No. 1 days; 133 Class No. 2 days; 55 Class No. 3 days; 12 Class No. 4 days; and 1 Class No. 5 day.

Legal Fires:

Legal fires are all forest fires which are previously authorized by the landowner, and started by him or his authorized agent, and which burn entirely upon his land. Legal fire records show that individual landowners conducted 1,969 fires which burned 242,327 acres for various purposes during 1963-64. Fires used in hazard reduction totaled 584 and burned 110,874 acres. One hundred forty fires burning 53,793 acres were handled on hunting preserves for the purpose of improving woodland hunt-

ing conditions and game management. Burnings conducted to reduce debris and rubbish in woodlands accounted for 725 fires and 10,211 acres burned. Burning of timberland for grazing purposes showed a total of 153 fires burning 46,561 acres, and 367 fires burning 20,888 acres were carried out for miscellaneous purposes such as destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

Forest fire occurrence and acreage burned were somewhat below normal for the past fiscal year. The Commission of Forestry recorded 3,817 wild fires and 34,752.2 acres burned, compared with 5,441 fires and 68,315.1 acres burned during the previous year, 1962-63.

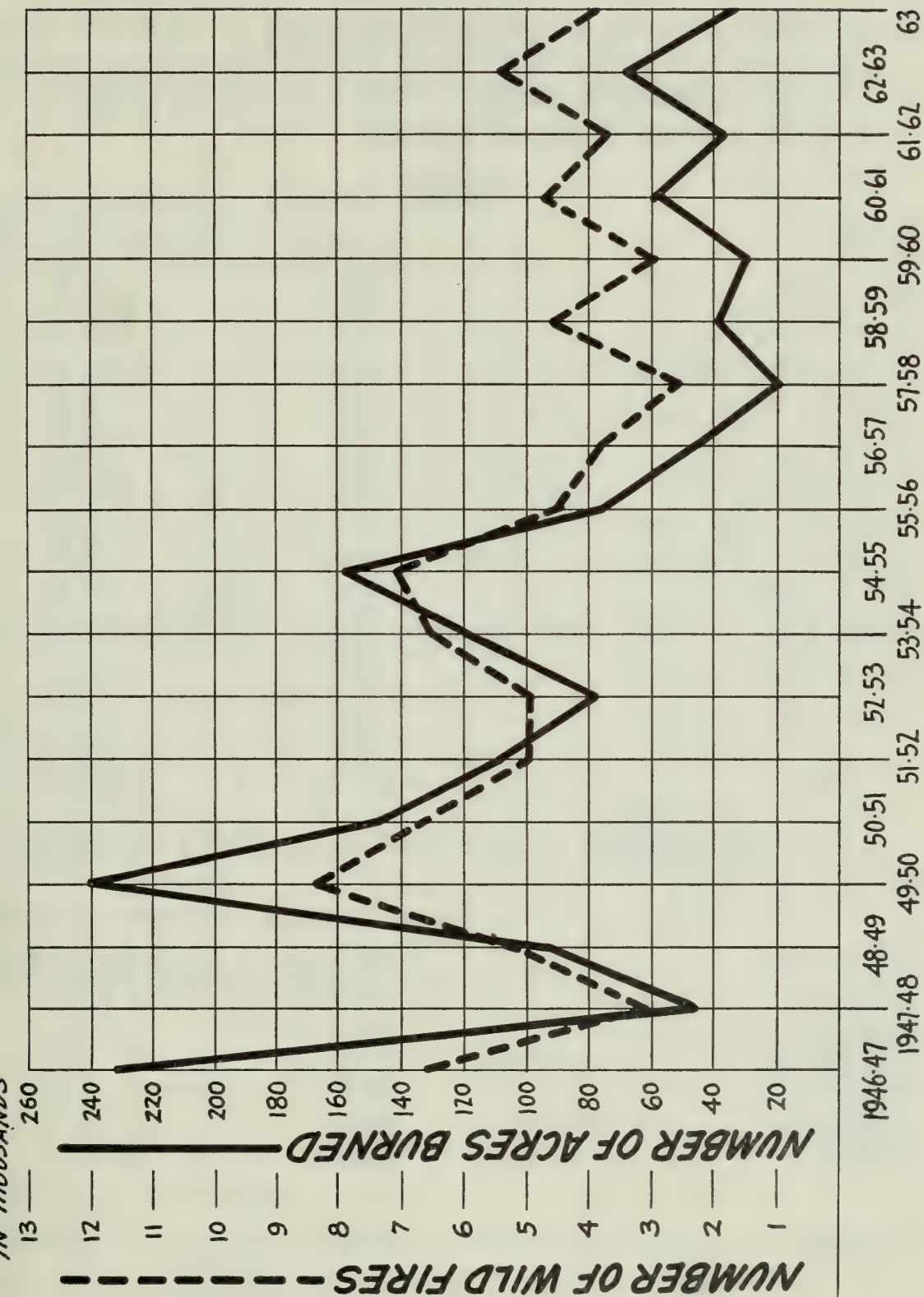
The 1963-64 fire season represents 1,624 fewer fires and 33,562.9 fewer acres burned than the previous fiscal year. Woodland acreage burned during the past year amounted to .31 percent of the 11,175,000 acres under protection in the state. The average area burned per fire was 9.1 acres.

Weather conditions during the spring months, when heaviest forest fire losses usually occur, were generally favorable. Except for one dry period during mid-May, rainfall was ample and helped keep fire occurrence and acreage losses to normal levels. Records show that March and April were the months when most fires occurred and most acres burned.

The leading cause of fires was careless smokers, accounting for 27.5 percent of the total fires; second was debris burning, 24.6 percent; incendiarism was the third highest cause and started 22.0 percent of the total fires in the state.

Counties experiencing heavy losses last year were Georgetown with 110 fires and 6,107.8 acres burned; Horry with 196 fires and 3,688.6 acres; Williamsburg with 240 fires burning 2,669.7 acres; and Berkeley which had 230 fires burning 2,746.8 acres. Light losses were experienced in many counties, including Greenwood with 44 fires and 77.3 acres burned; Pickens had 54 fires and lost 88.9 acres; Cherokee County recorded 27 fires burning 130.1 acres; Saluda County's wild fires totaled 45 and burned 129.5 acres; and Calhoun had 22 fires burning 129.5 acres.

Recorded precipitation in South Carolina during fiscal year 1963-64 was almost four inches more than the previous fiscal



year. The 53.93 inches of rainfall recorded at the 46 fire danger measurement stations in the state represent a departure from normal of 8.47 above the long-time average. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

<u>Month</u>	<u>Amount Rainfall (Inches)</u>	<u>Departure from Normal (Inches)</u>
July, 1963	4.75	—1.01
August, 1963	2.56	—2.74
September, 1963	5.47	+ 2.08
October, 1963	0.41	—2.31
November, 1963	4.70	+ 2.16
December, 1963	3.24	—0.25
January, 1964	7.06	+ 3.76
February, 1964	6.20	+ 2.58
March, 1964	6.40	+ 2.13
April, 1964	5.16	+ 1.56
May, 1964	2.81	—0.57
June, 1964	5.17	+ 1.08
Total	53.93	+ 8.47

A five-year summary of precipitation by fiscal years is shown below:

<u>Year</u>	<u>Amount Rainfall (Inches)</u>	<u>Departure from Normal (Inches)</u>
1959-60	64.29	+ 15.46
1960-61	55.00	+ 6.17
1961-62	51.27	+ 2.44
1962-63	50.03	+ 3.47
1963-64	53.93	+ 8.47
Average	54.90	+ 7.20

APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1963 - June 30, 1964

Receipts

Division of Forestry:

Balance From 1962-63, Forestry Commission-Specials	\$ 6,177.37	
Balance From 1962-63, Construction of Forestry Center	125,706.98	
State Appropriation-Operating	1,951,953.00	
Forestry Commission — Specials, CM Law Sec. 2	387,700.00	
Forestry Commission — Specials, CM Law Sec. 4	6,000.00	
Forestry Commission — Specials, Coop. Forest Management	62,300.00	
Forestry Commission — Specials, Soil Bank—Title IV Program	61,270.00	
Forestry Commission — Specials, A.S.C.S.	15,004.32	
Forestry Commission — Specials, Watersheds	28,738.78	
County and Timber Firms (\$2,781.92 + \$14,584.50)	17,366.42	
Departmental Revenue (State Forests S.O.E.P.)	351,875.36	
Pine Beetle Control — (Special Account)	7,319.00	
Construction of Forestry Center (Loans & Property Sale)	265,530.00	
Nurseries	206,062.02	
Timber Marking	11,636.82	
Plowing Firebreaks	420.00	
Miscellaneous	795.13	
Total Receipts — Forestry		\$3,505,855.20
Less Receipts Deposited to Credit of State Revenue Account		243,114.31
Total Receipts Available for Expenditure		\$3,262,740.89
Total Expenditures		3,131,761.50
Balance — Division of Forestry		*130,979.39

Division of State Parks:

Balance From 1962-63, Forest & Parks — Beach Village	\$ 6,410.93
Balance From 1962-63, Santee Boat Landing	452.56
Balance From 1962-63, Croft Timber Receipts (Timber Sale)	28,163.96
Balance From 1962-63, Parks Timber Salvage Receipts	2,888.91
Balance From 1962-63, Parks Improvements	35,038.76
Balance From 1962-63, Myrtle Beach Fishing Pier	3,106.14
Balance From 1962-63, Myrtle Beach Swimming Pool	992.94

Balance From 1962-63, Fort Dorchester — Special	689.90	
Balance From 1962-63, Huntington Beach — Special	17,165.37	
State Appropriation — Operating	415,796.00	
State Appropriation — Historical Areas	27,543.00	
Forests & Parks Fund — Hunting Island Deposits	2,220.85	
Forests & Parks Fund — Santee Boat Landing	512.09	
Forests & Parks Fund — Croft Timber Sale	7,869.70	
Deficiency Appropriation — Chester State Park	24,000.00	
Miscellaneous Appropriation — Oconee State Park	5,600.00	
Damage to Myrtle Beach Pier & Park, etc. (Claim)	72,500.00	
Myrtle Beach Fishing Pier	22,629.37	
Myrtle Beach Swimming Pool	5,777.35	
Cabin Rentals	13,025.53	
Refreshment Stands & Concessions	1,013.88	
Bathhouse & Swimming	28,933.00	
Boat Rentals	2,035.95	
Picnic Shelters & Recreation Buildings	2,003.98	
Group Camps	12,511.25	
Day Camps & Trailer Fees	18,371.81	
Miscellaneous; Sales Tax	2,652.29	
		<hr/>
Total Receipts — Parks		\$ 759,905.52
Less Receipts Deposit to Credit of State Revenue Account		80,547.69
		<hr/>
Total Receipts Available for Expenditure		679,357.83
Total Expenditures		545,112.02
		<hr/>
Balance — Division of State Parks		†134,245.81

Expenditures

Administrative & Technical	\$ 717,904.89	
State Forestry Nurseries	273,484.15	
State Forests	270,095.05	
Fire Protection	1,375,137.26	
Construction of Forestry Center ..	312,540.63	
25% Payment to Counties (3)	87,968.84	
Payment of Loan to State		
Sinking Funds & Property	80,046.18	
Harbison State Forest — Special ..	14,584.50	
		<hr/>
Total — Division of Forestry		\$3,131,761.50
Total — Division of State Parks		545,112.02
		<hr/>
GRAND TOTAL — Expenditures		\$3,676,873.52

Recapitulation

Funds Available:

Division of Forestry	\$3,262,740.89	
Division of State Parks	679,357.83	
	<hr/>	3,942,098.72

Expenditures:

Division of Forestry	3,131,761.50	
Division of State Parks	545,112.02	
	<hr/>	3,676,873.52
Balance		*†265,225.20

Balances:

* Forestry:	Forestry Commission—Specials ..\$	34,483.04	
	Construction of Forestry Center	75,496.35	
	State Appropriation	21,000.00	
† Parks:	Forests & Parks Fund	7,023.30	
	Parks Improvements	13,180.61	
	Myrtle Beach Fishing Pier	6,556.81	
	Myrtle Beach Swimming Pool	1,464.34	
	Myrtle Beach Pier and Park, etc.	65,012.53	
	Huntington Beach—Special	17,165.37	
	Chester State Park—Special	23,842.85	
	<hr/>		\$ 265,225.20

TABLE 1—PROTECTION PERSONNEL
Fiscal Year 1963-1964

UNIT	ORGANIZED PERSONNEL					Volunteer Personnel	GRAND TOTAL
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	149	154
Aiken	1	4	2	5	12	354	366
Allendale	1	3	1	3	7	87	94
Anderson	1	2	1	3	7	167	174
Bamberg	1	2	1	2	6	135	141
Barnwell	1	2	2	2	7	206	213
Beaufort	1	3	2	4	10	51	61
Berkeley	1	4	2	4	11	355	366
Calhoun	1	2	1	2	6	109	115
Charleston	1	4	3	3	11	118	129
Cherokee	1	1	1	1	4	133	137
Chester	1	3	1	1	6	159	165
Chesterfield	1	3	1	4	9	162	171
Clarendon	1	3	2	3	9	114	123
Colleton	1	4	3	5	13	207	220
Darlington	1	2		3	6	802	808
Dillon	1	2	1	2	6	218	224
Dorchester	1	4	2	3	10	123	133
Edgefield	1	2	1	1	5	193	198
Fairfield	1	4	1	3	9	157	166
Florence	1	4	2	4	11	384	395
Georgetown	1	4	2	4	11	542	553
Greenville	1	3	1	4	9	504	513
Greenwood	1	2	1	2	6	147	153
Hampton	1	3	1	3	8	120	128
Horry	1	5	3	4	13	478	491
Jasper	1	3	2	2	8	305	313
Kershaw	1	3	2	6	12	363	375
Lancaster	1	3	1	2	7	329	336
Laurens	1	3	1	2	7	266	273
Lee	1	2	1	3	7	101	108
Lexington	1	3	2	5	11	179	190
McCormick	1	1	1	1	4	76	80
Marion	1	3	2	3	9	329	338
Marlboro	1	3	2	3	9	341	350
Newberry	1	2	1	2	6	203	209
Oconee	1	2	1	3	7	194	201
Orangeburg	1	5	3	5	14	319	333
Pickens	1	3	1	4	9	189	198
Richland	1	5	2	4	12	647	659
Saluda	1	2	1	1	5	232	237
Spartanburg	1	3	1	4	9	598	607
Sumter	1	3	2	3	9	407	416
Union	1	2	1	1	5	143	148
Williamsburg	1	5	2	4	12	850	862
York	1	2	1	4	8	286	294
TOTALS	46	134	69	138	387	12,531	12,918

TABLE 2—SUMMARY OF FIRES BY MONTHS
July 1, 1963 - June 30, 1964

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Avg. Area Per Fire (Acres)
July	63	1.7	199.5	3.2
August	235	6.2	757.9	3.2
September	80	2.1	331.0	4.1
October	366	9.5	3,722.9	10.2
November	392	10.3	2,780.5	7.0
December	487	12.7	3,783.3	7.8
January	278	7.3	1,517.9	5.5
February	292	7.6	2,168.8	7.4
March	689	18.1	8,120.0	11.8
April	522	13.7	4,524.9	8.7
May	268	7.0	6,085.6	22.7
June	145	3.8	759.9	5.2
TOTALS	3,817	100.0	34,752.2	9.1

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1963-1964

UNIT	Lightning		Campfire		Smoking		Debris Burning		Incendiary		Machine Use		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	4	6.8	4	5.2	9	27.7	7	24.7	6	34.1	2	6.0	6	14.5	30	107.0
Aiken	1	0.1	1	1.5	34	133.3	28	241.9	5	117.5	4	22.2	38	100.4	112	509.8
Allendale	..	..	2	6.7	27	157.9	15	297.9	2	6.2	1	4.0	2	3.8	34	469.0
Anderson	..	..	3	53.5	20	102.1	8	21.7	7	92.7	3	10.2	6	19.6	48	222.3
Barnwell	1	12.0	1	4.0	15	52.7	17	69.4	4	13.8	1	1.3	4	10.0	52	329.2
Beaufort	..	..	11	..	11	47.6	11	66.7	6	87.7	3	10.2	13	39.0	48	198.4
Berkeley	1	1.5	1	3.0	66	578.7	13	67.4	100	1,463.5	2	22.0	1	0.2	33	222.9
Calhoun	3	28.2	13	..	57	678.1	57	678.1	3	40.8	1	10.0	4	12.0	230	2,746.8
Charleston	1	15.0	1	1.2	43	133.1	8	43.0	12	45.2	..	..	3	3.8	22	129.5
Cherokee	..	..	1	2.0	5	8.8	6	22.1	2	13.0	2	5.5	17	55.9	84	298.9
Chester	..	..	2	23.6	12	65.2	9	49.2	6	47.9	5	25.1	8	56.0	27	130.1
Chesterfield	9	3.0	10	8.2	10	183.1	7	45.8	9	30.9	4	159.4	6	13.1	40	224.1
Clarendon	..	..	5	25.6	18	119.5	25	191.5	61	336.2	..	..	9	28.1	50	458.5
Colleton	3	3.1	49	14.5	44	198.2	44	355.5	33	233.3	..	3.0	12	..	109	672.8
Darlington	2	3.6	1	2.3	54	170.2	38	179.0	10	30.4	5	298.9	30	137.9	140	822.3
Dillon	1	1.5	19	..	19	142.5	21	70.9	14	151.6	2	2.7	15	13.1	58	230.7
Dorchester	1	17.0	1	7.2	40	1,223.4	17	203.4	..	..	1	75.0	2	11.8	76	1,689.4
Edgefield	..	..	15	..	15	88.7	12	19.3	..	..	1	4.0	14	53.0	42	165.6
Fairfield	7	58.4	3	3.4	20	91.8	7	54.3	..	..	6	36.7	3	1.2	46	245.8
Florence	2	28.5	1	11.0	52	210.4	44	147.1	74	333.2	5	23.9	18	80.5	196	834.6
Georgetown	1	0.1	2	32.0	30	4,091.0	21	877.3	36	946.4	16	155.7	4	5.3	110	6,107.8
Greenville	..	..	2	0.3	31	116.6	29	43.7	6	7.9	5	20.4	26	37.6	99	226.5
Greenwood	..	..	12	..	12	20.7	16	35.6	2	1.8	4	6.6	10	12.6	44	77.3
Hampton	2	64.0	3	42.0	7	19.1	21	202.6	19	214.1	1	5.0	5	22.9	58	569.7
Harvey	5	79.5	4	75.2	50	399.1	46	511.7	42	796.9	..	..	49	1,823.2	196	3,688.6
Jasper	3	18.0	4	38.0	11	130.5	14	167.6	39	1,176.9	4	7.4	14	72.7	89	1,611.1
Kershaw	3	7.8	6	57.4	25	213.7	15	97.8	10	37.2	12	167.7	25	131.8	96	713.4
Lancaster	..	..	6	16.6	12	45.1	19	113.7	10	61.9	2	47.1	8	17.4	57	301.8
Laurens	..	..	6	..	26	122.9	11	17.5	1	1.2	11	53.0	17	93.8	66	288.4
Lee	1	3.0	6	26.0	12	57.1	13	110.4	9	40.9	1	1.5	2	2.2	44	241.1
Lexington	5	4.9	2	9.2	7	16.7	16	48.6	..	..	7	26.3	10	52.3	47	158.0
Marion	2	1.0	6	72.3	21	58.1	10	48.4	17	323.6	7	67.3	2	1.0	65	571.7
Marlboro	..	..	..	..	26	146.7	39	206.6	18	74.0	13	107.4	18	12.6	114	547.3
McCormick	1	80.0	..	..	8	20.3	3	4.2	2	0.3	8	39.1	5	39.9	27	183.8

Newberry	1	0.1	3	8.3	7	27.6	10	14.7	1	4.0	1	1.0	24	62.1	43	109.4
Oconee	2	11.7	11	241.8	13	30.9	15	54.7	7	10.2	5	11.8	12	8.8	56	124.8
Orangeburg					39	215.9	31	258.6	86	1,101.0	6	71.9	13	114.8	188	2,015.7
Pickens	1	0.2	12	1.9	13	22.4	14	36.1	1	0.4	10	9.8	14	18.3	54	88.9
Richland	1	3.0	2	97.4	46	291.2	43	149.2	38	366.3	8	114.6	25	95.6	173	1,114.5
Saluda					4	8.2	5	6.9					33	104.1	45	129.5
Spartanburg					17	106.2	8	37.0	3	13.0	11	49.0	20	161.3	61	369.5
Sumter					35	282.5	37	245.5	28	145.2	1	14.0	19	59.0	127	755.0
Union	1	2.0	7	8.8	3	20.0	6	15.0			14	175.0	7	19.0	32	231.5
Williamsburg	1	3.0	11	288.8	26	255.9	87	845.1	99	1,226.4	7	22.2	9	48.3	240	2,669.7
York			2	6.0	26	147.8	15	56.1	10	52.1			9	55.5	62	317.5
TOTALS	62	457.0	132	1,205.7	1,048	10,680.0	938	7,057.1	838	9,679.7	208	1,922.3	591	3,750.4	3,817	34,752.2
Percent of Total Number	1.6		3.5		27.5		24.6		21.9		5.4		15.5		100.0	

TABLE 4—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA
FISCAL YEAR 1963-1964

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville	167,647	30	107.0	.06	3.6
Aiken	401,376	112	509.8	.13	4.6
Allendale	131,400	34	469.0	.36	13.8
Anderson	173,700	48	222.3	.13	4.6
Bamberg	126,000	52	329.2	.26	6.3
Barnwell	74,565	48	198.4	.27	4.1
Beaufort	165,000	33	222.9	.14	6.8
Berkeley	399,091	230	2,746.8	.69	11.9
Calhoun	123,500	22	129.5	.10	5.9
Charleston	271,114	84	298.9	.11	3.6
Cherokee	127,800	27	130.1	.10	4.8
Chester	260,023	40	224.1	.09	5.6
Chesterfield	310,000	50	458.5	.15	9.2
Clarendon	228,500	109	672.8	.29	6.2
Colleton	465,000	147	832.0	.18	5.7
Darlington	208,500	140	822.3	.39	5.9
Dillon	144,100	58	230.7	.16	4.0
Dorchester	268,200	76	1,689.4	.63	22.2
Edgefield	172,363	42	165.6	.10	3.9
Fairfield	338,957	46	245.8	.07	5.3
Florence	293,900	196	834.6	.28	4.3
Georgetown	415,600	110	6,107.8	1.47	55.5
Greenville	267,800	99	226.5	.08	2.3
Greenwood	198,963	44	77.3	.04	1.8
Hampton	239,500	58	569.7	.24	9.8
Horry	557,600	196	3,688.6	.66	18.8
Jasper	303,400	89	1,611.1	.53	18.1
Kershaw	336,500	96	713.4	.21	7.4
Lancaster	199,400	57	301.8	.15	5.3
Laurens	244,621	66	288.4	.12	4.4
Lee	110,600	44	241.1	.22	5.5
Lexington	291,500	47	158.0	.05	3.4
Marion	224,700	65	571.7	.25	8.8
Marlboro	150,600	114	547.3	.36	4.8
McCormick	144,859	27	183.8	.13	6.8
Newberry	204,949	43	109.4	.05	2.5
Oconee	257,632	56	124.8	.05	2.2
Orangeburg	318,800	188	2,015.7	.63	10.7
Pickens	190,100	54	88.9	.05	1.6
Richland	289,500	173	1,114.5	.38	6.4
Saluda	149,946	45	129.5	.09	2.9
Spartanburg	208,300	61	369.5	.18	6.1
Sumter	205,400	127	755.0	.37	5.9
Union	157,894	32	231.5	.15	7.2
Williamsburg	429,800	240	2,669.7	.62	11.1
York	226,300	62	317.5	.14	5.1
TOTALS	11,175,000	3,817	24,752.2	.31	9.1

UNIT	Aug. 1963			Sept. 1963			Oct. 1963			Nov. 1963			Dec. 1963			Jan. 1964			Feb. 1964			March 1964			April 1964			May 1964			June 1964		
	No.	Acres		No.	Acres		No.	Acres		No.	Acres		No.	Acres		No.	Acres		No.	Acres		No.	Acres		No.	Acres		No.	Acres				
Abbeville	4	7.3	21.5	4	5.9	17	8.8	6	33.3	1	4.0	1	1.6	2	8.0	9	40.5	3	5.3	4	6.5	1	0.6	6	15.2	1	0.6	1	0.6	1	0.6		
Aiken	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Allendale	2	4.1	3.2	1	3.5	3	24.0	8	42.8	9	32.6	3	31.0	5	19.8	18	80.1	10	59.1	12	14.5	6	6.5	3	3.1	3	3.1	3	3.1	3	3.1		
Anderson	1	1.0	3.2	..	..	..	..	5	24.3	2	12.5	2	5.2	4	9.0	3	93.0	4	247.0	4	3.1	1	0.6	1	0.6	1	0.6	1	0.6	1	0.6
Bamberg	1	1.2	3.0	..	..	..	..	9	36.4	4	9.3	3	5.2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barnwell	1	0.4	3.3	1	0.2	5	22.7	6	29.5	6	31.8	3	5.9	1	3.0	16	103.2	8	112.6	3	4.6	3	3.2	3	3.2	3	3.2	3	3.2	3	3.2		
Beaufort	..	..	..	..	..	..	..	6	12.9	9	31.8	5	14.6	8	44.0	5	47.4	2	8.0	1	12.0	1	12.0	1	12.0	1	12.0	1	12.0	1	12.0
Berkeley	2	1.6	40.6	1	1.5	8	32.0	17	205.7	47	734.2	14	101.4	24	276.3	50	733.8	47	553.7	9	31.0	9	31.0	4	25.4	4	25.4	4	25.4	4	25.4		
Calhoun	..	..	..	1	2.8	4	28.5	1	0.4	5	37.6	..	..	3	39.7	1	4.5	3	10.4	2	2.0	2	2.0	3	35.0	3	35.0	3	35.0	3	35.0
Charleston	..	..	..	1	5.0	1	0.8	7	19.1	21	87.6	8	16.7	13	24.7	11	54.5	12	45.6	8	29.6	2	15.3	2	15.3	2	15.3	2	15.3	2	15.3
Cherokee	5	..	12.8	..	..	..	..	6	53.5	..	..	1	0.6	2	18.0	4	16.5	4	6.0	3	18.0	..	..	..	..	..	..	..	..	..	..
Chester	..	..	..	..	..	..	..	6	10.6	2	6.0	..	..	4	10.3	7	92.1	6	26.9	2	0.9	3	2.1	3	2.1	3	2.1	3	2.1	3	2.1
Chesterfield	2	0.4	5.2	2	2.6	5	16.1	7	7.4	2	9.7	1	10.0	2	157.0	8	181.0	7	22.1	8	37.9	4	13.6	4	13.6	4	13.6	4	13.6	4	13.6		
Clarendon	..	..	..	1	1.0	3	12.0	11	67.7	7	9.5	11	58.5	20	126.9	27	192.5	23	161.1	1	2.0	1	2.0	5	41.6	5	41.6	5	41.6	5	41.6
Colleton	3	18.7	9.3	2	3.0	22	87.4	9	12.8	21	63.4	2	1.8	11	32.6	34	325.7	25	215.4	13	58.9	3	3.1	3	3.1	3	3.1	3	3.1	3	3.1		
Darlington	5	11.7	25.8	4	39.1	13	329.7	17	19.4	22	74.4	15	115.7	7	72.6	19	61.6	18	37.7	8	19.0	5	13.2	1	0.9	1	0.9	1	0.9	1	0.9		
Dillon	3	0.6	8.5	3	29.6	8	99.5	7	11.0	7	11.7	6	4.3	2	3.3	11	47.0	2	1.1	5	13.2	1	7.2	1	7.2	1	7.2	1	7.2	1	7.2		
Dorchester	1	17.0	2.0	1	33.0	7	185.2	4	33.0	10	66.0	8	46.0	5	49.0	23	1135.8	12	100.0	3	15.2	3	15.2	3	39.5	3	39.5	3	39.5	3	39.5		
Edgefield	1	0.1	6.5	3	46.3	7	53.6	5	20.7	4	4.1	1	3.5	2	2.8	7	13.1	3	15.5	3	6.2	3	6.2	3	11.0	3	11.0	3	11.0	3	11.0		
Fairfield	1	0.9	19.5	7	21.0	9	9.9	9	20.8	1	2.4	1	20.0	3	6.5	5	88.1	2	2.2	5	18.2	2	11.0	2	11.0	2	11.0	2	11.0	2	11.0		
Florence	..	..	..	3	0.6	7	9.6	11	31.7	10	53.0	15	160.7	6	72.9	10	255.5	8	60.5	2	16.6	4	0.1	4	0.1	4	0.1	4	0.1	4	0.1
Georgetown	..	..	..	3	1.7	22	886.5	6	27.8	16	177.4	11	127.5	4	18.0	23	619.8	17	368.0	8	3881.1	1	8.0	1	8.0	1	8.0	1	8.0	1	8.0
Greenville	..	..	..	4	2.1	16	44.2	17	25.2	1	5.6	7	13.7	6	74.2	20	29.1	16	25.6	6	0.2	3	3.3	3	3.3	3	3.3	3	3.3	3	3.3
Greenwood	..	..	..	1	0.6	1	..	7	9.8	5	7.7	5	6.2	6	10.1	4	3.1	7	29.3	1	0.2	3	3.3	3	3.3	3	3.3	3	3.3	3	3.3
Hampton	2	5.0	16.0	2	2.0	3	9.6	11	31.7	10	53.0	15	160.7	6	72.9	10	255.5	8	60.5	2	16.6	4	0.1	4	0.1	4	0.1	4	0.1	4	0.1		
Horry	3	46.3	46.3	5	15.1	32	279.5	27	382.9	26	346.5	8	66.5	5	51.9	10	846.9	17	203.2	29	1267.7	7	26.4	7	26.4	7	26.4	7	26.4	7	26.4		
Jasper	2	12.6	4.0	..	..	..	..	22	902.5	22	232.8	15	66.5	5	25.7	14	312.3	14	170.2	3	19.5	1	13.0	1	13.0	1	13.0	1	13.0	1	13.0
Kershaw	4	5.1	44.9	3	3.4	16	64.4	4	24.6	7	26.3	3	4.0	5	2.8	9	77.8	14	106.6	7	29.1	3	12.5	3	12.5	3	12.5	3	12.5	3	12.5		
Lancaster	..	..	..	..	..	..	..	5	14.1	1	0.1	5	11.5	3	2.8	9	77.8	14	106.6	7	29.1	3	12.5	3	12.5	3	12.5	3	12.5	3	12.5
Laurens	13	85.5	5.7	6	41.6	6	41.6	8	12.8	51	28.3	8	39.6	5	7.0	7	76.7	8	15.1	3	1.1	3	3.3	3	3.3	3	3.3	3	3.3	3	3.3		
Lee	1	3.0	..	1	12.0	3	3.8	5	17.4	8	12.8	4	23.0	3	8.3	6	37.4	7	64.4	2	3.7	1	8.0	1	8.0	1	8.0	1	8.0	1	8.0		
Lexington	4	3.6	23.5	5	8.0	3	0.5	4	6.3	5	17.4	4	23.0	3	8.3	6	37.4	7	64.4	2	3.7	1	8.0	1	8.0	1	8.0	1	8.0	1	8.0		
Marion	3	3.2	50.8	2	2.6	8	375.8	9	33.8	10	13.5	1	0.1	2	1.4	12	66.1	6	7.9	8	16.5	3	23.0	3	23.0	3	23.0	3	23.0	3	23.0		
Marlboro	2	10.2	2.4	1	1.2	3	33.2	9	37.9	13	18.3	13	36.8	14	67.3	31	119.9	9	112.9	10	84.2	6	32.0	6	32.0	6	32.0	6	32.0	6	32.0		
McComick	..	..	..	..	..	..	..	2	3.1	1	1.1	1	0.2	2	9.2	8	52.8	5	4.4	3	8.9	3	9.8	3	9.8	3	9.8	3	9.8	3	9.8
Newberry	1	4.0	53.0	..	..	..	..	8	11.0	3	2.1	1	9.0	3	1.6	4	5.4	3	4.7	3	8.9	3	9.8	3	9.8	3	9.8	3	9.8	3	9.8
Oconee	1	0.2	0.4	..	..	..	..	16	147.5	31	285.8	15	77.1	5	10.4	13	44.3	9	34.3	7	10.3	4	8.2	4	8.2	4	8.2	4	8.2	4	8.2
Orangeburg	3	14.3	8.0	1	0.2	2	1.3	8	14.7	3	2.1	3	2.3	5	10.4	13	44.3	9	34.3	7	10.3	4	8.2	4	8.2	4	8.2	4	8.2	4	8.2		
Pickens	..	..	..	..	..	..	..	16	13.2	31	0.8	6	5.0	17	264.6	39	390.4	37	565.5	7	38.6	5	81.9	5	81.9	5	81.9	5	81.9	5	81.9
Richland	..	..	..	..	..	..	..	17	153.1	26	376.0	5	31.8	11	53.5	28	150.4	4	23.1	4	2.3	1	0.3	1	0.3	1	0.3	1	0.3	1	0.3
Saluda	4	10.8	26.0	7	18.7	14	62.8	17	44.2	17	7.1	2	8.3	11	16.0	1	4.2	22	144.7	17	71.1	7	15.6	7	15.6	7	15.6	7	15.6	7	15.6		
Spartanburg	..	..	..	..	..	..	..	2	4.4	2	7.1	2	8.3	1	16.0	1	4.2	2	0.9	3	4.0	2	6.0	2	6.0	2	6.0	2	6.0	2	6.0
Sumter	1	8.0	19.0	2	1.5	5	37.5	8	65.0	1	1.0	6	17.7	2	33.0	9	69.5	15	110.3	3	4.0	1	3.0	1	3.0	1	3.0	1	3.0	1	3.0		
Union	2	1.4	7.0	6	18.2	20	74.5	18	104.0	18	104.0	12	70.5	20	107.8	17	193.0	20	101.4	4	35.1	5	42.1	5	42.1	5	42.1	5	42.1	5	42.1		
Williamsburg	1	2.0	..	2	2.0	6	21.5	1	3.0	2	2.5	1	8.0	1	8.0	1	16.0	10	63.0	4	36.0	3	77.5	3	77.5	3	77.5	3	77.5	3	77.5		
York	2	7.0	24.9	7	64.8	15	200.3	11	50.6	52	673.6	23	187.9	10	210.2	69	905.4	33	275.2	9	69.7	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1		
TOTALS	63	199.5	757.9	80	331.0	366	3722.9	392	2780.5	487	3783.3	278	1517.9	292	2168.8	689	8120.0	522	4524.9	268	6085.6	145	759.9	145	759.9	145	759.9	145	759.9	145	759.9		

**TABLE 6—STATE SUMMARY LAW ENFORCEMENT INFORMATION
FISCAL YEAR 1963-1964**

	Camden	Florence	Kingstree	Newberry	Orangeburg	Spartanburg	Walterboro	STATE TOTAL
Part A.								
1. No. Willful and Malicious Fires.....	31	79	18	2	10	10	21	171
2. No. Intentional Fires	66	87	240	1	87	21	96	598
3. No. Careless and Negligent Fires.....	272	359	344	188	276	301	309	2,049
4. Total Fires with Fire Law Violations...	369	525	602	191	373	332	426	2,818
5. No. Fires with No Fire Law Violations..	178	244	87	192	130	107	61	999
6. Total No. All Fires.....	547	769	689	383	503	439	487	3,817
Part B.								
1. No. Prosecutions (16-317)	3	.....	.....	.....	.....	.....	3	6
2. No. Prosecutions (16-318)	35	35	14	19	14	21	54	192
3. No. Prosecutions Other Violations.....	1	4	6	.....	3	3	7	24
4. Total No. Prosecutions.....	39	39	20	19	17	24	64	222
Part C.								
1. No. Convictions (16-317)	3	.....	.....	.....	.....	.....	3	6
2. No. Convictions (16-318)	32	35	14	18	8	20	52	179
3. No. Convictions Other Violations.....	1	4	6	.....	3	3	5	22
4. Total No. Convictions	36	39	20	18	11	23	60	207

**TABLE 7—CAUSES OF FIRES—FIVE-YEAR-PERIOD
(Percent of Total)**

CAUSES	1959-60	1960-61	1961-62	1962-63	1963-64	Average For 5-Year Period
Lightning	1.4	0.8	2.0	0.9	1.6	1.3
Campers	2.2	3.0	2.8	3.1	3.5	2.9
Smokers	32.2	32.8	31.6	25.6	27.5	29.9
Debris Burning	32.4	29.7	27.3	26.8	24.6	28.2
Incendiary	19.8	23.8	20.6	30.5	21.9	23.3
Machine Use	4.0	2.2	4.0	3.7	5.4	3.9
Miscellaneous	8.0	7.7	11.7	9.8	15.5	10.5

**TABLE 8—FIVE-YEAR SUMMARY
FOREST FIRE STATISTICS**

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1959-60	11,175,000	2,958	29,785.8	0.27	10.1
1960-61	11,175,000	4,776	59,969.8	0.54	12.6
1961-62	11,175,000	3,668	35,795.0	0.32	9.8
1962-63	11,175,000	5,441	68,315.1	0.61	12.5
1963-64	11,175,000	3,817	34,752.2	0.31	9.1
Five-Year Average	11,175,000	4,132	45,723.6	0.41	11.1

**TABLE 9—S. C. STATE COMMISSION OF FORESTRY 1963-64 SEEDLING DISTRIBUTION
BY LAND CLASSIFICATION**

Land Ownership	Trees Planted
Farmers	18,550,070
Other Individuals	8,250,857
Associations and Clubs	1,027,950
Lumber Company	1,772,500
Pulp and Paper Co.	6,795,000
Other Industry	5,894,045
Schools	227,850
State Forests	5,316,325
Other State Lands	117,000
Cities, Towns, Counties	180,000
Federal Government	3,314,000
TOTAL	51,445,597

In addition to the above seedlings, the following organizations either brought into the state or produced for planting the number of trees shown:

Continental Can Company	2,755,000
Catawba Timber Company	1,665,000
West Virginia Pulp and Paper Company	4,542,000
Union Bag-Camp Paper Corporation	1,458,000
Williams Furniture Company	135,000
Greenville-Spartanburg Airport Commission	46,000
Canal Wood Corporation	198,000
U. S. Forest Service	145,000
J. T. Strahan Company	34,000
Total	10,978,000

Grand Total, Trees Planted in S. C., 1963-64.....62,423,597

In addition to the above tree planting, a total of 7,139 acres were direct seeded to pine during the fiscal year.

TABLE 10—SEEDLING DISTRIBUTION FROM STATE NURSERIES AND OTHER SOURCES BY COUNTIES, SPECIES AND AMOUNT—1963-64

COUNTY	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red Cedar	Yellow Poplar	*Miscellaneous Species	Total	** Direct Seedling Acres
Abbeville	864,460	3,840	40,000	.....	500	10,000	5,024	923,824	474
Aiken	103,700	4,246,700	491,500	1,500	114,750	1,000	2,000	4,961,150	3,367
Allendale	265,000	394,500	10,000	.....	2,500	.....	.....	672,000	.....
Anderson	354,600	8,000	4,500	9,750	33,600	1,050	5,680	417,180	.....
Bamberg	50,000	257,500	9,500	500	1,500	3,000	.....	322,000	.....
Barnwell	15,500	1,208,100	.....	.....	8,500	.....	2,500	1,234,600	198
Beaufort	275,000	701,500	500	.....	3,500	.....	.....	980,500	30
Berkeley	1,197,400	722,600	2,000	.....	1,500	.....	2,000	1,925,500	79
Calhoun	121,500	166,000	7,500	.....	.....	.....	.....	285,000	.....
Charleston	87,600	291,900	.....	.....	1,000	.....	.....	380,500	143
Cherokee	997,800	1,500	3,000	2,700	2,500	1,000	2,000	1,010,500	.....
Chester	1,731,000	25,000	500	.....	500	.....	.....	1,757,000	375
Chesterfield	341,000	3,820,800	.....	.....	5,000	.....	92,325	6,013,125	.....
Clarendon	416,500	1,008,000	1,734,000	.....	8,000	50,000	40,000	1,531,500	.....
Colleton	1,183,700	541,000	500	500	4,000	11,000	70,500	1,811,200	1,022
Darlington	74,500	226,300	9,000	.....	3,500	1,000	25,000	313,300	.....
Dillon	213,000	361,500	7,500	.....	1,000	.....	.....	609,000	.....
Dorchester	699,000	292,500	500	.....	1,000	.....	500	993,000	49
Edgefield	1,162,700	27,000	4,500	.....	9,500	.....	.....	1,204,200	120
Fairfield	802,000	10,000	4,500	.....	1,000	.....	.....	817,500	178
Florence	49,250	159,500	6,250	.....	1,000	14,000	500	230,500	.....
Georgetown	1,561,000	785,000	.....	.....	5,000	.....	.....	2,346,000	.....
Greenville	731,400	3,500	4,000	34,300	5,000	8,000	3,445	789,645	48
Greenwood	763,000	1,000	.....	5,000	.....	25,000	6,335	800,335	45
Hampton	63,000	1,344,500	34,500	.....	1,000	3,000	.....	1,446,500	.....
Horry	464,750	1,209,000	4,500	.....	1,000	.....	.....	1,683,750	.....
Jasper	430,000	2,066,000	16,000	.....	5,500	.....	.....	2,512,000	159
Kershaw	724,500	2,772,950	73,000	73,000	.....	57,000	1,100	3,701,550	58
Lancaster	977,500	40,000	.....	.....	500	.....	.....	1,019,000	.....
Laurens	1,789,900	500	.....	1,000	2,500	500	5,000	1,800,500	495
Lee	182,000	248,500	9,000	2,100	500	.....	1,000	441,000	.....
Lexington	54,750	1,633,500	49,500	500	20,500	11,000	1,400	1,771,150	.....

Marion	272,500	359,500	2,000	13,000	3,000	5,000	639,000
Marlboro	163,500	417,500	2,500	500	3,000		599,500
McCormick	413,300	13,000			1,000		430,800
Newberry	607,400	38,000	500				648,900
Oconee	1,147,825	10,000	5,652	6,700	7,005	179,251	1,303,933
Orangeburg	403,500	1,078,500	49,000	1,020	8,270	1,275	1,541,565
Pickens	448,775		1,250	9,360	7,100	10,695	488,180
Richland	384,300	577,450	35,000	400	7,100	10	1,004,760
Saluda	39,200	3,000	5,500				107,700
Spartanburg	1,269,000	3,000	4,500	14,150	4,000	47,330	1,347,480
Sumter	486,600	1,233,200	162,500	12,500	2,000	50,000	1,954,300
Union	1,913,700	27,000			500	48,000	1,989,200
Williamsburg	1,462,300	376,100	12,000	500	1,000	1,853,400	102
York	1,046,600	11,500	5,000	100	1,000	1,045	1,070,270
Experimental	488,000		1,500	180,000	200	400	670,100
TOTAL	29,353,510	28,726,440	2,842,152	308,050	227,550	609,315	62,423,597
				576,580			7,139

* Miscellaneous Species

Cottonwood	14,107
Virginia Pine	103,900
Scotch Pine	64,665
Shortleaf Pine	148,000
Sand Pine	120,200
Table Mountain Pine	1,525
Austrian Pine	500
Mexican Pine	4,000
Japanese Black Pine	412
Dogwood	78
Catalpa	1,334
Black Walnut	8,150
Chestnut	1,385
Maple	3,088
Sweetgum	2,000
Cypress	135,971

** Direct Seeding

Loblolly	3,021
Slash	553
Longleaf	3,565

TABLE 11—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

COUNTY	Seedlings Planted 1929-63	Seedlings Planted 1963-64	Grand Total Planted to Date	Acres Planted Through June 30, 1964	Acres Needing Planting as of June 30, 1964
Abbeville	19,639,988	923,824	20,563,812	20,564	132,179
Aiken	122,964,069	4,961,150	127,925,219	127,925	243,741
Allendale	41,257,945	672,000	41,929,945	41,930	41,141
Anderson	28,280,884	417,180	28,698,064	28,698	192,474
Bamberg	26,283,900	322,000	26,605,900	26,606	37,984
Barnwell	71,371,480	1,234,600	72,606,080	72,606	63,936
Beaufort	7,090,095	980,500	8,070,595	8,071	53,998
Berkeley	28,688,935	1,925,500	30,614,435	30,614	105,579
Calhoun	13,870,025	295,000	14,165,025	14,165	47,309
Charleston	6,513,490	380,500	6,893,990	6,894	67,262
Cherokee	12,476,521	1,010,500	13,487,021	13,487	123,610
Chester	23,509,385	1,757,000	25,266,385	25,266	146,473
Chesterfield	62,010,600	6,013,125	68,023,725	68,024	162,642
Clarendon	19,388,715	1,531,500	20,920,215	20,920	25,684
Colleton	38,501,305	1,811,200	40,312,505	40,313	109,297
Darlington	13,263,920	313,300	13,577,220	13,577	68,848
Dillon	6,771,455	609,000	7,380,455	7,380	31,733
Dorchester	24,172,480	993,000	25,165,480	25,165	80,375
Edgefield	15,759,038	1,204,200	16,963,238	16,963	53,641
Fairfield	21,131,719	817,500	21,949,219	21,949	129,751
Florence	6,698,618	230,500	6,929,118	6,929	52,666
Georgetown	18,292,600	2,346,000	20,638,600	20,639	89,310
Greenville	16,059,254	789,645	16,848,899	16,849	203,828
Greenwood	18,709,272	800,335	19,509,607	19,510	57,256
Hampton	33,140,365	1,446,500	34,586,865	34,587	80,921
Horry	19,382,895	1,683,750	21,066,645	21,067	140,108
Jasper	30,177,130	2,512,000	32,689,130	32,689	58,593
Kershaw	86,793,937	3,701,550	90,495,487	90,495	144,735
Lancaster	24,121,953	1,019,000	25,140,953	25,141	116,167
Laurens	35,004,059	1,800,500	36,804,559	36,805	141,015
Lee	11,367,555	441,000	11,808,555	11,809	59,633
Lexington	30,568,690	1,771,150	32,339,840	32,340	153,271
McCormick	8,901,675	639,000	9,540,675	9,541	79,404
Marion	7,619,545	599,500	8,219,045	8,219	14,544
Marlboro	20,668,430	430,800	21,099,230	21,099	12,657
Newberry	22,332,573	648,900	22,981,473	22,981	89,128
Oconee	14,683,720	1,363,933	16,047,653	16,048	238,828
Orangeburg	46,240,150	1,541,565	47,781,715	47,782	52,494
Pickens	14,204,009	488,180	14,692,189	14,692	184,353
Richland	32,145,340	1,004,760	33,150,100	33,150	125,296
Saluda	8,183,971	107,700	8,291,671	8,292	46,734
Spartanburg	30,405,534	1,347,480	31,753,014	31,753	199,897
Sumter	37,150,392	1,954,300	39,104,692	39,105	53,057
Union	20,465,774	1,989,200	22,454,974	22,455	131,547
Williamsburg	12,268,015	1,853,400	14,121,415	14,121	65,310
York	28,258,176	1,070,270	29,328,446	29,328	194,679
Experimental	1,361,673	670,100	2,031,773	2,032	.....
TOTAL	1,238,151,254	*62,423,597	1,300,574,851	1,300,575	4,703,088

* 631,000 seedlings purchased from Georgia Forestry Commission.

STATE OF SOUTH CAROLINA
REPORT
OF THE
STATE COMMISSION OF FORESTRY
FOR THE YEAR
JULY 1, 1964 to JUNE 30, 1965



JOHN R. TILLER, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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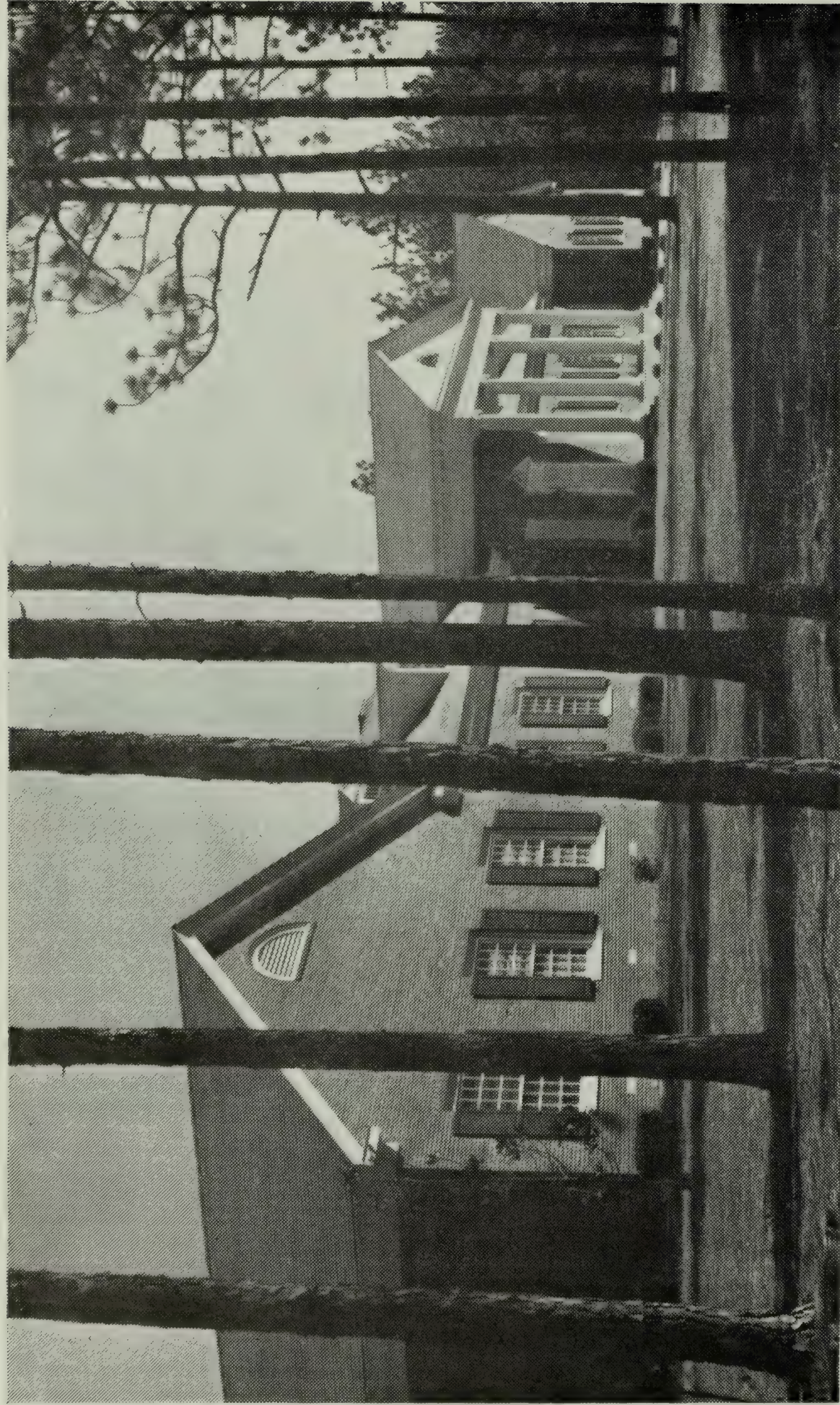
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To Honorable Robert E. McNair, Governor, and to the General Assembly of South Carolina:

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual report upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1964 to June 30, 1965.

Respectfully submitted,

STATE COMMISSION OF FORESTRY
Fulton B. Creech, *Chairman*.



Occupied on August 20, 1964, the new headquarters building of the S. C. State Commission of Forestry, located on Harbison State Forest on Highway 176, ten miles north of Columbia, serves as the nerve center for all state forestry and state parks services.

S. C. COMMISSION OF FORESTRY

Members of the Commission

Fulton B. Creech, Chairman, Sumter

Dr. Robert C. Edwards, President, Clemson University,
Clemson

C. H. Niederhof, Charleston

A. Brandon Taylor, Jr., Spartanburg

Robert R. Rigby, Jr., Columbia

Administration

John R. Tiller, State Forester and Secretary to the Commission

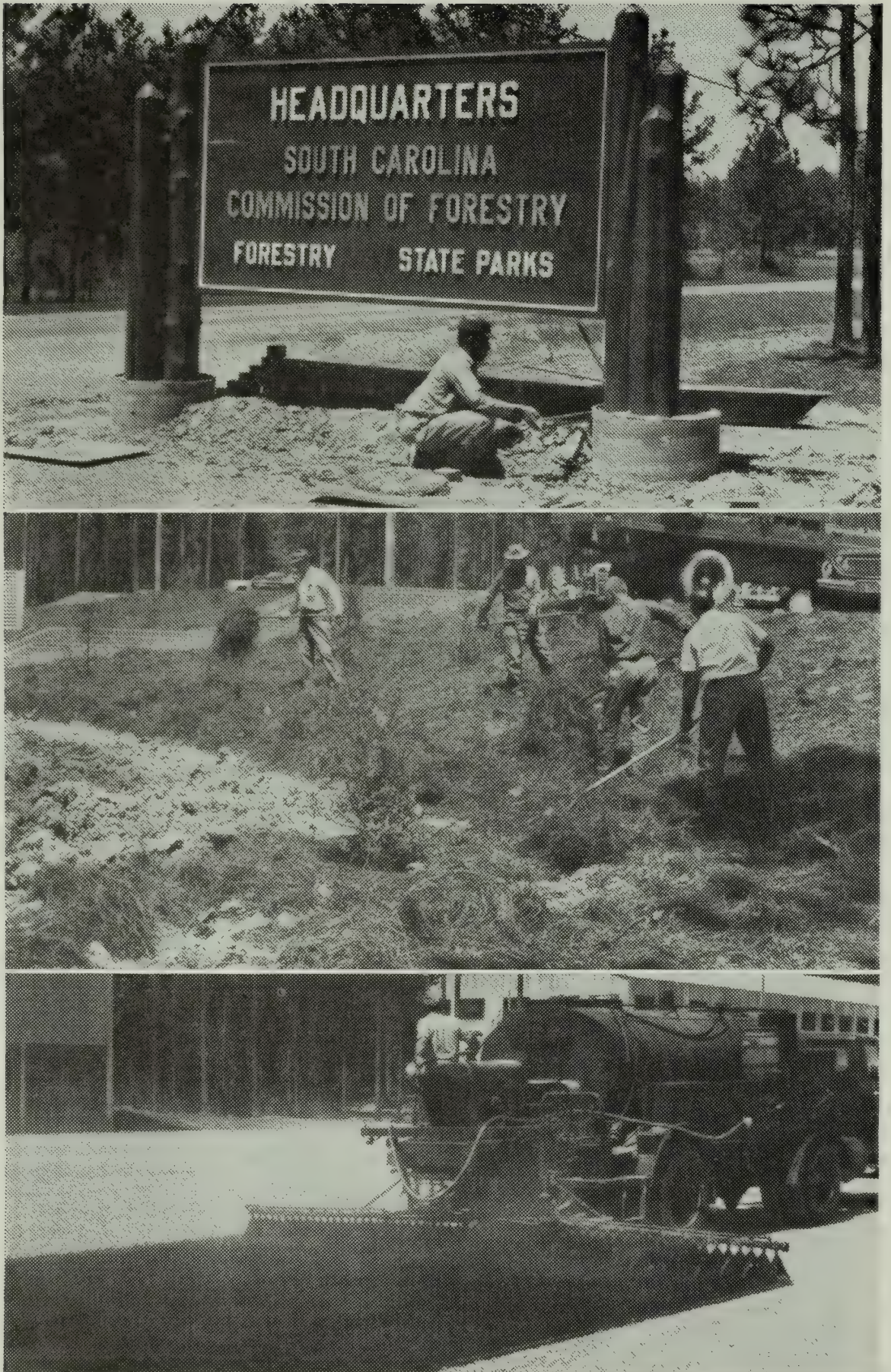
John M. Shirer, Assistant State Forester, Fire Control

Edward C. Pickens, Assistant State Forester, Management

Walter T. Ahearn, Assistant State Forester, Information and
Education

Howard R. Scott, Assistant State Forester, Administration

E. R. Vreeland, State Park Director



A massive "Headquarters" sign is erected on Highway 176 (upper). Shrubbery and pine straw mulching serves to "dress off" the grounds around the new building (center). Crushed granite and asphalt go to make all-weather entrance roads and parking lots (lower).

Administration

SUMMARY

State-appropriated funds were provided for salary adjustments, however, losses of both technical and other personnel continued at an excessive rate. A total of 70 employees resigned during the year, of which 64% were county personnel.

The Commission budgeted and expended on all phases of the Forestry and State Park program \$3,371,757.93. Of this total the Division of Forestry expended \$2,991,293.61 and the Division of State Parks \$380,464.32. (See Appendix for detailed explanation of funds available and expenditures made.) State-appropriated funds amounted to \$1,957,441.00 for the Division of Forestry and \$350,878.00 for the Division of State Parks.

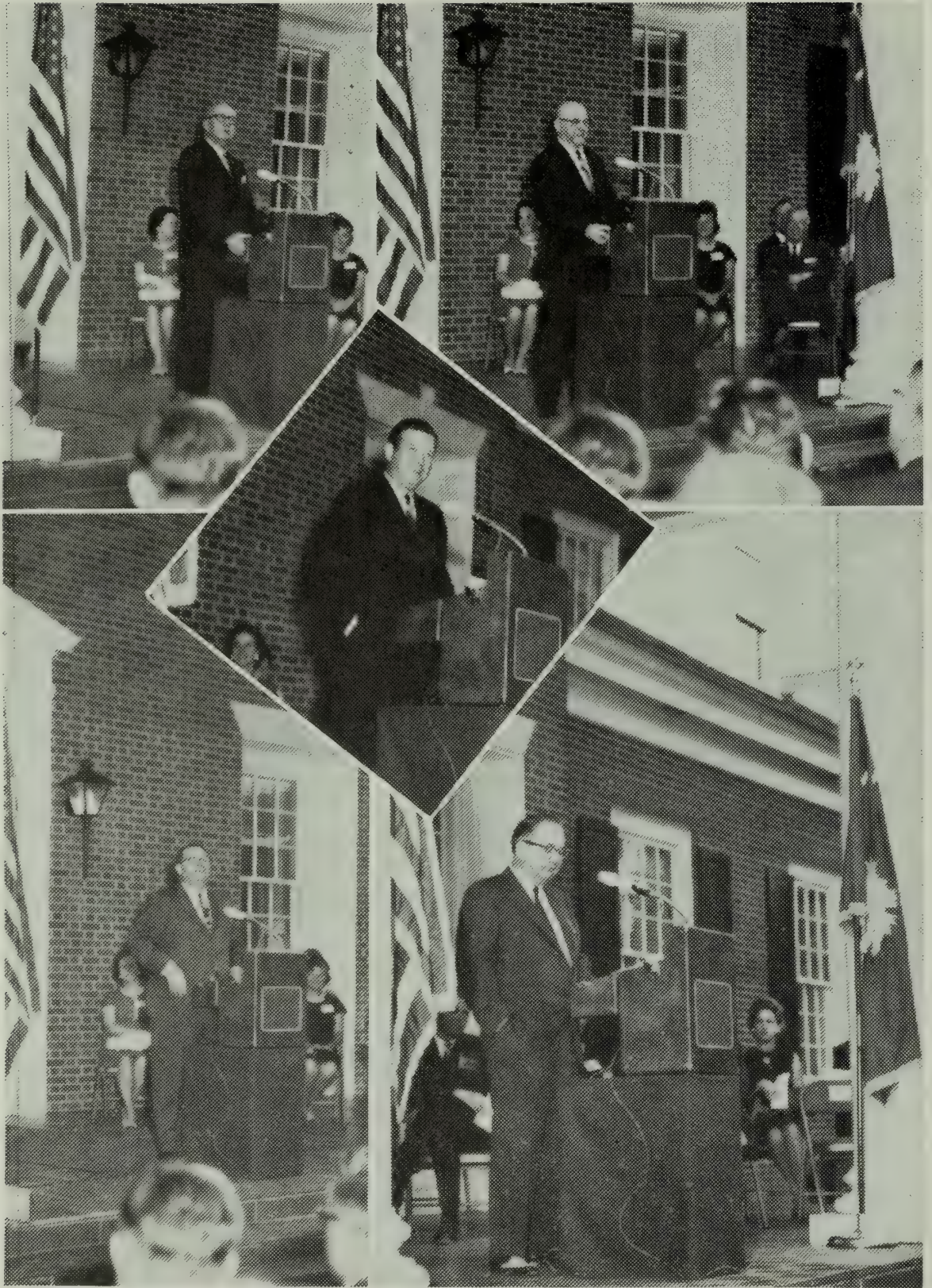
PERSONNEL ACCIDENT AND INJURY

During the year 55 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

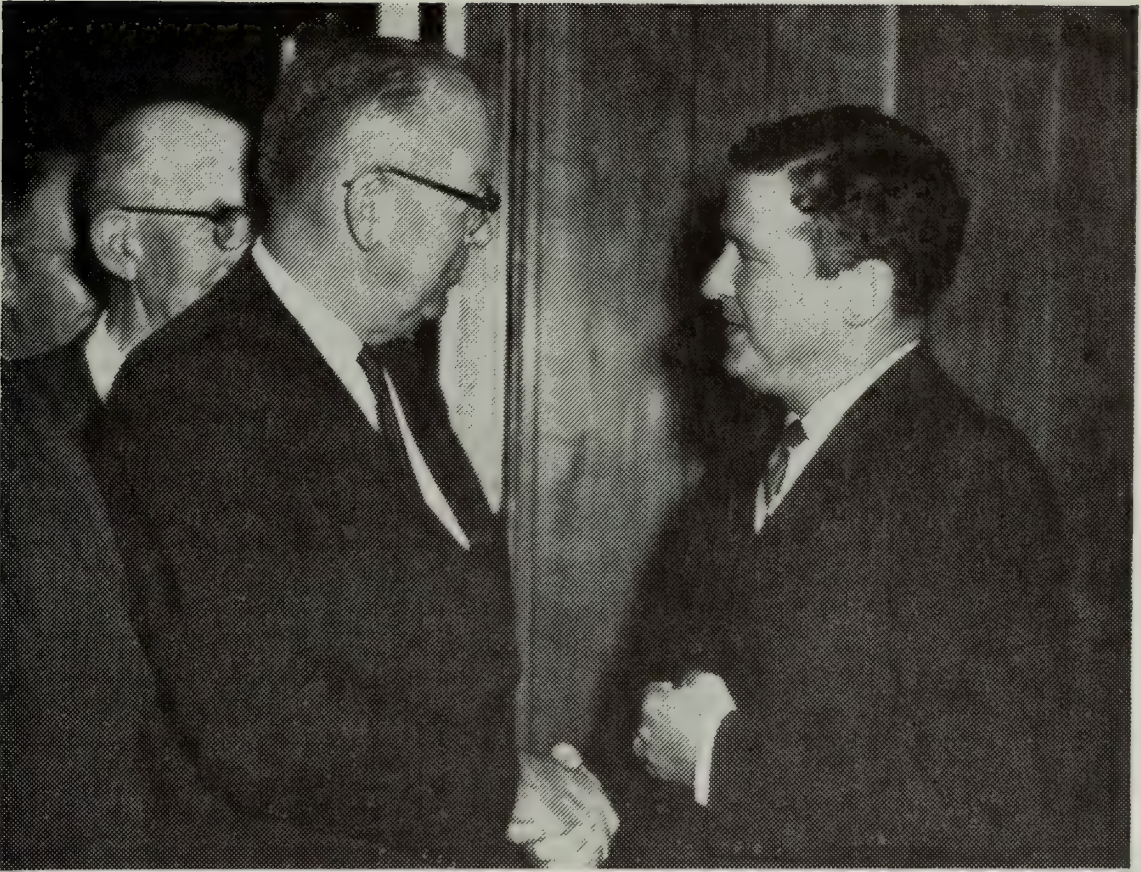
Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel drove Commission-owned motor vehicles or personal vehicles on Commission business approximately three million miles and were involved in only 9 accidents. Of the 9 accidents which occurred, 4 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business, through specific training and assistance of the National Safety Council.



On May 4, 1965 Governor Robert E. McNair (center); Senator Edgar A. Brown, President Pro Tempore of the Senate (upper left); Hon. Solomon Blatt, Speaker of the House of Representatives (upper right); Dr. Robert C. Edwards, President of Clemson University and member of the S. C. State Commission of Forestry (lower left); and Mr. Fulton B. Creech, Chairman of the S. C. State Commission of Forestry (lower right), speak from under white columns at the dedication of the new headquarters.



Governor Robert E. McNair (above) greets guests from all over the state as they enter the Forestry Commission's new headquarters. Some four hundred guests (below) enjoyed a buffet luncheon following the dedication ceremony and a tour of the headquarters building and new equipment maintenance, repair and warehouse system.

PERSONNEL

A large number of Commission employees continue to resign to accept better paying positions. Such resignations handicapped the efficient operation of all Commission activities. Twelve per cent of the total personnel resigned during the year; county unit personnel being the highest per cent to resign. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

Forest Fire Protection

INTRODUCTION

The Fire Control Branch of the S. C. State Commission of Forestry provides intensive forest fire protection assistance to all private timberland owners in the state. Cooperative fire protection assistance furnished each landowner, through county organizations, is based on the theory that the landowner is primarily responsible for the prevention and control of fires on his property, and the Commission of Forestry cooperates with the individual whenever and wherever possible. Many landowners throughout the state maintain fire suppression hand tools and mechanized equipment with sufficient personnel to adequately handle wild fires on their property.

Total state and private forest area in South Carolina comprises some 12,050,000 acres. In addition to the above total, the U. S. Forest Service protects 587,221 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

County Organizations:

Each county fire protection organization consists of a ranger, wardens, lookout towermen, and tractor operators. The number of personnel in each county varies according to the size and forest acreage. Total county personnel in South Carolina consists of 46 rangers, 134 wardens, 69 tractor operators, and 138 lookout towermen.

County Forestry Boards:

The State Forest Fire Protection Act of 1945 provides for a county forestry board consisting of five members to be appointed by the State Forester upon the recommendation of the majority of the County Legislative Delegation. The individuals who serve on the forestry boards are appointed for a five-year term. An annual board meeting is held each year to discuss and review forest fire protection activities within the county.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards is composed of one delegate from each county board elected by the

board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities. The committee meets annually to discuss the proposed forestry program for the coming fiscal year and also to consider the budget request which is submitted to the State Legislature.

Cooperative Agreements with U. S. Forest Service:

The Commission of Forestry and the U. S. Forest Service maintain a formal agreement to assist one another with the detection and suppression of fires which occur along the immediate vicinity of the national forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

Constant training is required to get the many and varied activities of the Fire Control Branch accomplished efficiently and economically. Training is designed to fit the individual and his job responsibility, with special emphasis being given to local and on-the-job training. Special group training is carried on periodically including such subjects as law enforcement, fire behavior, large fire organization, damage appraisal, and civil defense. Most training in the past year continued to be individual and on-the-job instruction.

Fire Control Inspections:

Each year, complete fire control inspections are carried out in the counties of the state in an effort to improve the efficiency of the fire control program. All phases of fire control activities are covered in these inspections which are conducted by Central Office and District Office personnel.

Inspections are also constantly being carried out on the fire control fleet of mechanized equipment. Emphasis is placed on preventive maintenance to keep fire suppression equipment in a complete state of readiness.

Inspections are made on equipment by traveling mechanics, district mechanics, and by the equipment operators.

Fire Control Progress Checks:

Periodically in each district of the state, fire control progress checks are held. The purpose of these checks is to inspect each facet of the entire fire control program to determine what can be done to improve the overall activities of the organization. These checks are carried out by the Central Office Fire Control staff in an endeavor to maintain a high degree of efficiency in the fire control program in all districts of the State.

Law Enforcement:

Ten additional people were commissioned during the past year to enforce the forest fire laws of the state. This brings to sixty-three the number of personnel of the S. C. Forestry Commission who are so commissioned.

Assistance and cooperation continued to be excellent from the S. C. Law Enforcement Division and local police organizations in prosecuting forest fire law violations.

Eighty-five cases were prosecuted and eighty-three convictions were obtained for various forest fire law violations. A breakdown of cases prosecuted is as follows: twelve prosecutions and twelve convictions for violation of the burning permit and/or notification laws; seventy-three prosecutions and seventy-one convictions for violation of the careless and negligent law; and no prosecutions and no convictions for violation of the willful and malicious law.

Burning Permit and Burning Notification Laws:

Counties with the permit law statutes are Chesterfield, Aiken, Orangeburg, Georgetown, Charleston, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Counties with notification laws include Beaufort, Colleton, Hampton, Jasper, and Lee. Abbeville, Allendale, Greenwood, Lancaster, McCormick, and Newberry passed notification laws during the past year.

Fire Plans:

Each county unit organization is provided with a fire control plan which guides and controls fire suppression activities within the unit. The plans are kept current and revised to conform with changing conditions and latest operating procedures.

Plans similar to the fire control plans used in county units are prepared for landowners throughout the state who desire to maintain adequate fire protection on their timberland ownerships.

Forestry Study Committee:

Members of this eleven-man committee are: C. H. Niederhof, J. D. Carroll, John D. Long, Harry M. Arthur, Frank E. Baldwin, Jr., Rembert C. Dennis, Earle R. Ellerbe, Charles G. Garrett, W. Clyde Graham, Clyde D. Jenkins, Jr., and Hubert W. Smoak.

The Committee conducts a series of meetings and hearings each year and formulates many recommendations which are consolidated in an annual report to the General Assembly. The General Assembly continued the Forestry Study Committee for the fiscal year 1965-66.

Southern States Forest Fire Control Conference:

The twenty-sixth Southern States Forest Fire Control Conference was held at Hot Springs, Arkansas, on May 24, 25, 26, and 27, 1965. These annual meetings are designed to allow exchange of fire control ideas between states and to promote efficiency in fire protection activities.

Southeastern States Forest Fire Compact Commission:

The ten Southeastern States of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia make up the Southeastern States Forest Fire Compact Commission.

The membership of this Commission from each state is comprised of a Compact Administrator (the State Forester) and a four-member advisory committee. The South Carolina membership includes Senator L. Marion Gressette of Calhoun County, Representative Charles G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County, and R. R. Rigby of Columbia.

Civil Defense:

The S. C. Forestry Commission cooperates with the State Civil Defense agency in emergencies and disasters which occur or may occur in the state. Assistance with communications and monitoring of radiological fallout is rendered by Commission personnel.

Lookout Towers:

There are 138 forest fire lookout towers in South Carolina which are operated by the S. C. State Forestry Commission. The U. S. Forest Service operates 19 lookout towers on the Sumter and Francis Marion National Forests in addition to the state-operated towers. State and federal towermen cooperate with each other in spotting and locating fires which occur within their range of visibility.

Tower Unit Buildings:

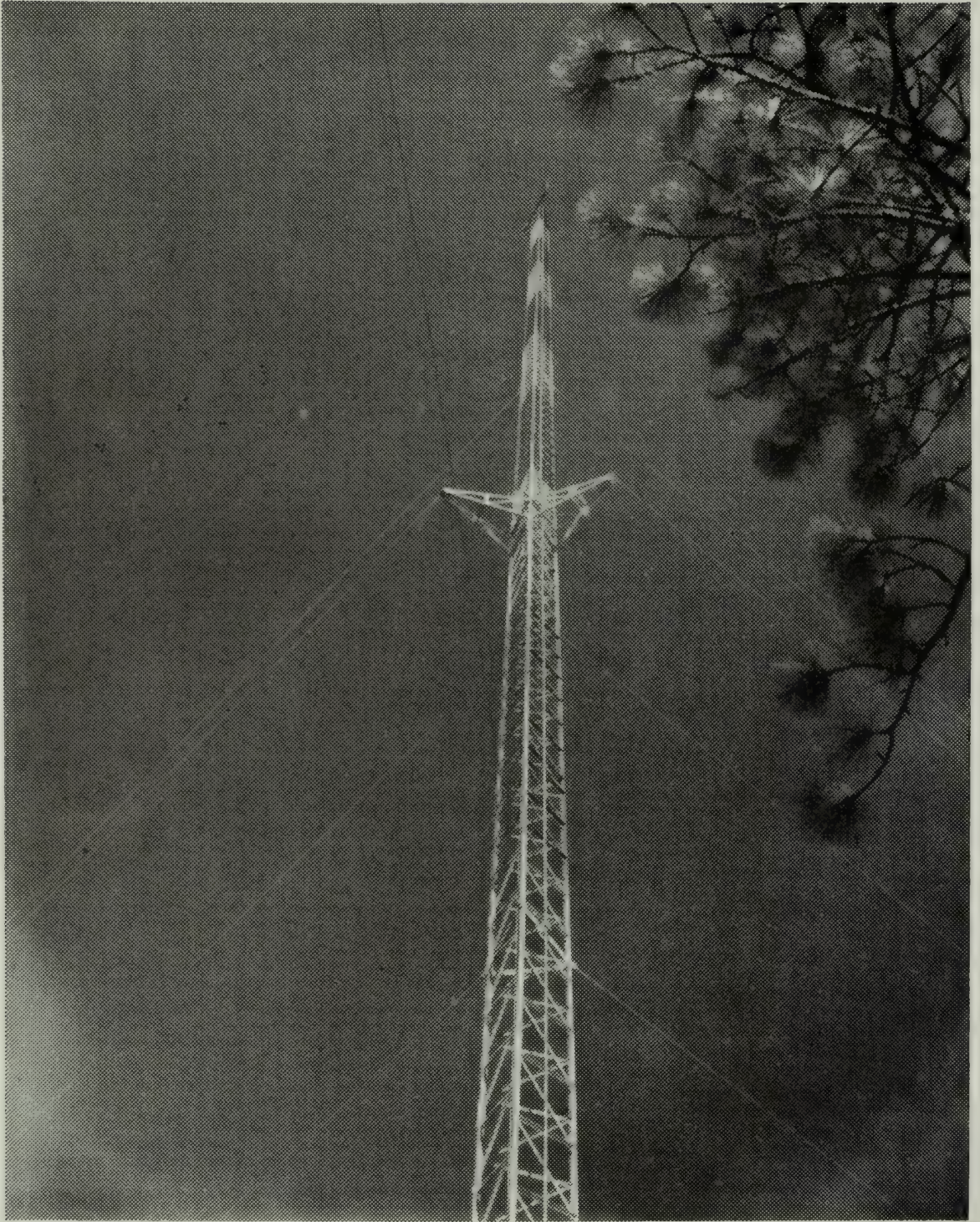
During the 1964-65 fiscal year, no major improvements were installed at the towersites. Routine maintenance jobs were carried out at all towers during the year.

**ESTIMATED CAPITAL VALUE OF
FIRE PROTECTION IMPROVEMENTS
(Based on Replacement Value)**

138 Lookout Tower Units	\$ 2,947,503
46 Fire Danger Measurement Stations	3,450
100 Miles Telephone Line	30,000
Central Radio Shop and Map Laboratory	25,000
Central Repair Shop and Warehouse System	286,480
7 District Repair Shops	35,000
<hr/>	
TOTAL	\$ 3,327,433

Radio:

A new 450 foot radio tower was completed in May, 1965, at the new Forestry Headquarters in Columbia. This affords more efficient communications between the central office and other radio installations throughout the state.



Pointing skyward, the Commission's new 450 foot radio communications tower, located on a hill behind the headquarters building, places an antenna 780 feet above sea level.

Proposed plans call for establishing a district radio shop at Newberry in keeping with the policy of placing the technician in closer proximity to the equipment which he services.

An additional number of transistorized radio units were installed on tractors and in ranger vehicles to improve the overall efficiency of the system.

ESTIMATED CAPITAL VALUE OF RADIO IMPROVEMENTS AND EQUIPMENT

4 Remote Control Base Units 250 watt -----@	\$3,000	\$ 12,000
1 Remote Control Base Unit 100 watt -----		2,000
11 Remote Control Base Units 60 watt -----@	1,400	15,400
6 Mobile Relay Base Units -----@	1,600	9,600
192 Local Control Base Units -----@	550	105,600
300 Mobile Units (Tube Type) -----@	550	165,000
10 Mobile Units (Transistorized) 80 watt (For Mobile Relay) -----@	810	8,100
50 Mobile Units (Transistorized) 80 watt @	650	32,500
47 Mobile Units (Transistorized) 15 watt ..@	400	18,800
14 Portable Units (1½, 3, 5, & 8 watts) -----@	700	9,800
134 Auxiliary Receivers -----@	155	20,770
9 Radio Towers -----		35,000
TOTAL -----		<hr/> \$ 434,570

Equipment:

Two additional medium suppression units, complete with truck and tractor, were added to the fire suppression fleet during the year. These two units were assigned to fire wardens in Florence and Dorchester Counties. Fourteen new tractors were purchased as replacements for old worn-out units during 1964-65. Twelve old medium suppression unit transports were replaced with new trucks last fiscal year, and twelve new pickup trucks were purchased as replacements for worn-out trucks being used by county rangers.

Three mechanic and radio technician trucks were replaced.

INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

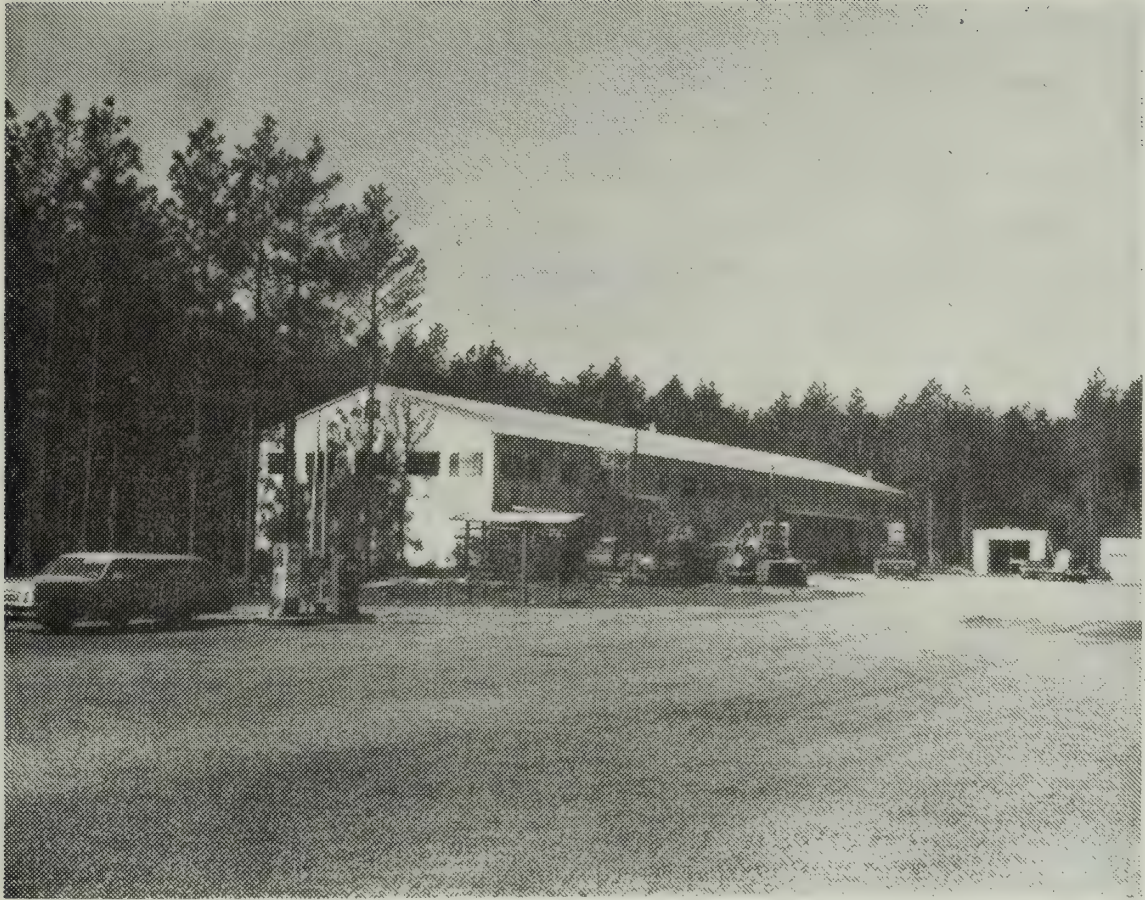
June 30, 1965

1,510 Back Pack Pumps	\$ 52,850
5,014 Fire Rakes	17,220
1,950 Fire Swatters	8,675
300 Backfire Torches	6,900
12 Heavy Suppression Tractor-Plow Units w/Transports	272,000
3 Heavy Dozers	80,000
84 Light Tractor-Plow Units w/Transports	672,000
2 Heavy Emergency Fire Suppression Units	64,000
3 Heavy Lowboy Truck-Transports	10,000
45 Ranger Pickup Trucks	78,750
1 1/4-Ton Jeep	2,250
7 Sedan Delivery Trucks	14,000
2 Two-Ton Stakebody Trucks	7,650
16 1/2-Ton Pickup Trucks	28,000
1 Mobile Field Headquarters Unit	3,200
1 Field Kitchen w/Power Supply Trailer & Water Truck	14,000
1 Supply Van	2,500
TOTAL	\$ 1,333,995

Equipment Maintenance Shop:

Since March of 1964, the S. C. State Commission of Forestry has had its Central Fire Control equipment maintenance shops and warehouses at 5500 Broad River Road, Columbia, S. C. Heavy and specialized repairs are made to all fire control equipment at this Central Shop location. All new fire control equipment is processed at the Central Shop.

Two traveling mechanics, headquartering at the Central Repair Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the district mechanics and equipment operators, make such necessary repairs as they are equipped to handle. During the past year, the traveling mechanics made 697 complete field inspections of equipment and conducted 1,462 field repair jobs. Installations of fire-fighting equipment were made on 26 new trucks.



The all steel equipment maintenance and repair shop, operating at the Harbison Forestry Center since March of 1964, serves the needs of the state by helping to keep the specialized fire fighting equipment ready for emergency use. Many special parts and modifications of equipment are made here to serve special needs and field conditions.

Central Shop personnel made many repairs to automotive equipment owned by the Commission and made many items necessary for field use. Some of the work handled by the mechanical force is listed below.

Major repairs were made to 14 tractors, 29 light trucks, 43 heavy trucks, 1 heavy plow, and 1 heavy trailer.

In addition to repair work, many items are adapted to field use or manufactured outright at the Central Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. The facilities are used for warehousing certain materials and supplies necessary for operation of the forestry districts and are headquarters for mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district.

Columbia Radio Shop:

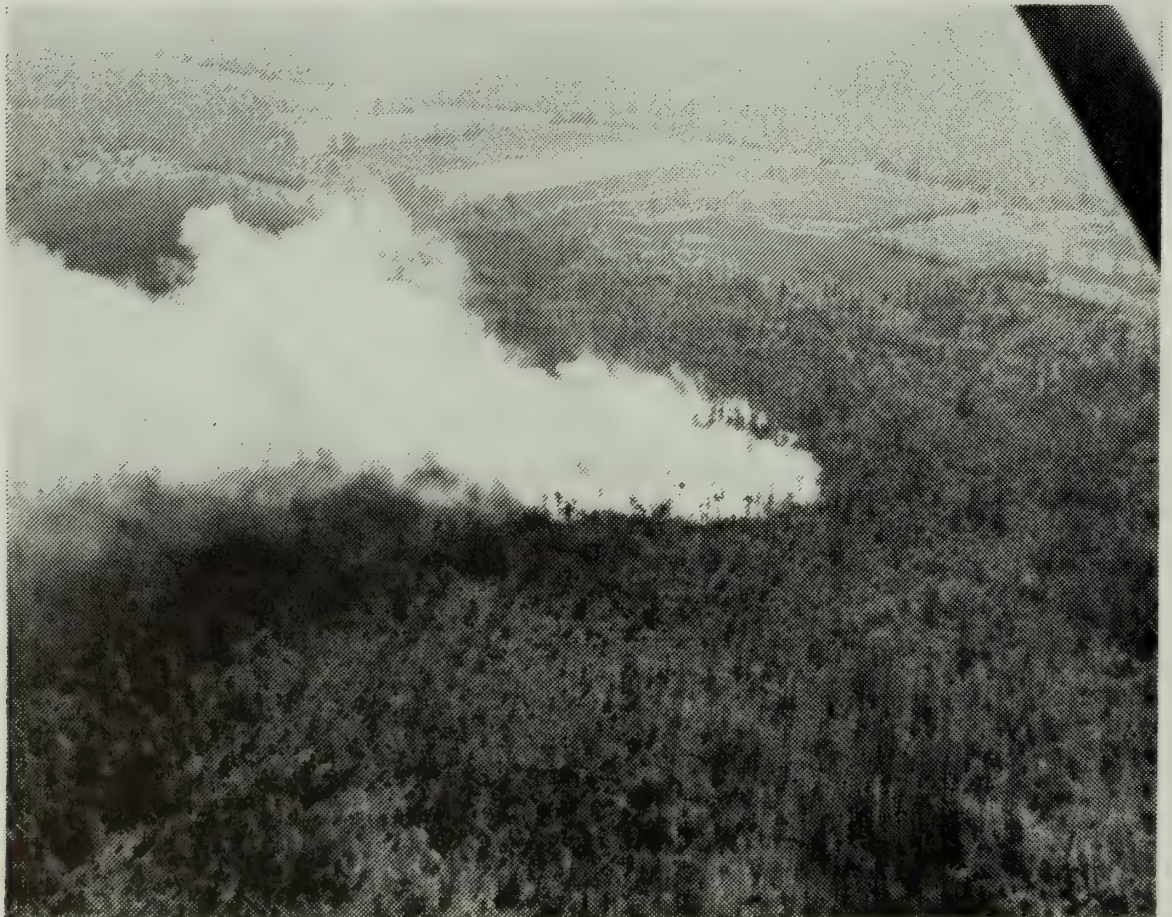
Central Radio Communications Maintenance and Repair Shop is located at 241 Catawba Avenue in Columbia. All activities, including installations, maintenance, and repair of communications equipment by the radio technicians assigned to the outlying district repair shops, are administered from this central headquarters.

Fire Control Maps:

Since 1958 a map laboratory, complete with drafting room and map making facilities, has been operated by the Commission of Forestry. All maps required in forest fire protection activities in the state are manufactured at this laboratory facility.

Use of Aircraft in Fire Control:

Arrangements have been made locally in each district to supplement lookout towers with aerial detection when necessary. Radio equipped airplanes are used on a contract basis. These



Though the Commission does not own any airplanes, during critical fire-weather planes are rented and used to provide vital supplemental detection and to help direct fire suppression activities on going fires.

rental aircraft are used to detect and check fires during periods of high occurrence, to direct suppression forces, and to assist law enforcement efforts in problem areas.

Firebreak Plowing Service:

The 1964 Session of the General Assembly included in the Division of Forestry Section of the General Appropriation Bill a provision whereby the Commission of Forestry may upon request, plow firebreaks for private owners and charge for the same at the rate of \$10.00 per hour for the use of heavy suppression equipment and \$8.00 per hour for the use of medium suppression equipment. During the fiscal year a total of approximately 355 miles of firebreaks were plowed on 112 properties. Medium suppression units were used 104 hours and heavy units were used 200 hours for this service.

FIREBREAK SERVICE BY DISTRICT

<i>District</i>	<i>Hours Med. Units</i>	<i>Hours Heavy Units</i>	<i>Number Properties</i>	<i>Approximate Miles Plowed</i>
Camden -----	3	17	9	21
Florence -----	21	7	12	28
Kingstree -----	9	85	38	126
Newberry -----	---	3	1	1
Orangeburg -----	29	5	12	37
Spartanburg -----	---	1	1	1
Walterboro -----	42	82	39	141
Total -----	104	200	112	355

Fire-Weather Forecasting:

In the latter part of the past fiscal year, South Carolina was provided with a fire weather forecasting service. Jerry Kanupp, meteorologist with the Department of Commerce, was assigned to the Weather Bureau office at the Columbia airport. Fire weather information, general and special forecasts, will be available through this office to interested agencies and persons throughout the state.

Fire Danger Measurement:

Fire danger measurement stations are maintained in each county of the state. Stations are read twice daily and the weather

information disseminated to all fire control personnel for their guidance in work planning and fire suppression readiness. Forest fire danger is rated by Class day ranging from 1 to 5, Class 1 being the least danger and 5 the greatest. During the past year, average danger station records indicated the following: 207 Class 1 days, 105 Class 2 days, 45 Class 3 days, 8 Class 4 days, and no Class 5 days.

Legal Fires:

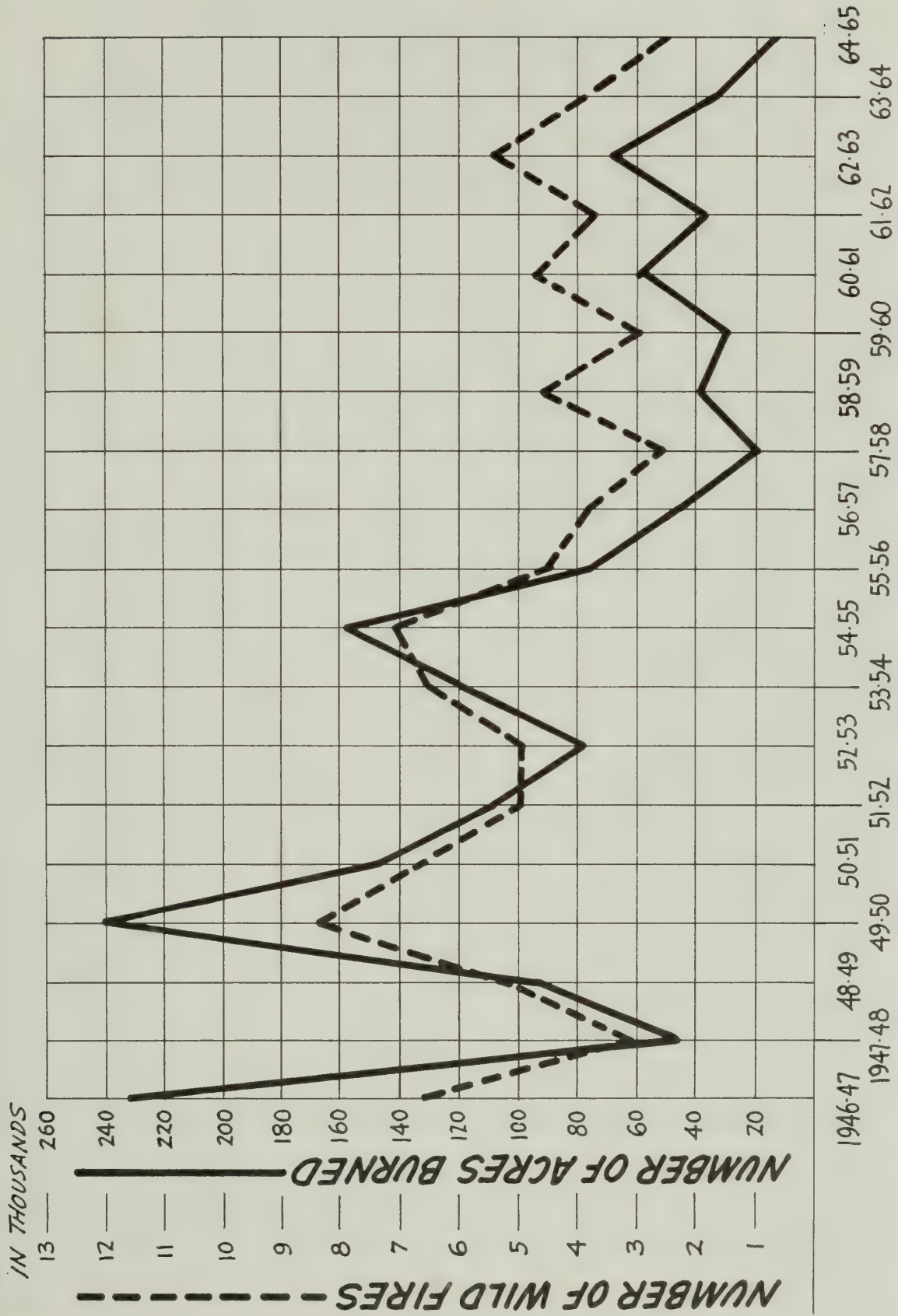
Legal fires are all forest fires which are previously authorized by the landowner, and started by him or his authorized agent, and which burn entirely upon his land. Legal fire records show that individual landowners conducted 1,924 fires which burned 182,150 acres for various purposes during 1964-65. Fires used in hazard reduction totaled 667 and burned 81,779 acres. A total of 372 fires burning 62,757 acres were handled on hunting preserves for the purpose of improving woodland hunting conditions and game management. Burnings conducted to reduce debris and rubbish in woodlands accounted for 556 fires and 6,968 acres burned. Burning of timberland for grazing purposes showed a total of 160 fires burning 10,832 acres, and 169 fires burning 19,814 acres were carried out for miscellaneous purposes such as destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

Fiscal year 1964-65 was the best year ever recorded in South Carolina for wildfire occurrence and acreage loss. Fire records show that 2,442 fires burned 18,826.5 acres or .16% of the 12,050,000 woodland acres under protection in the state. This compares with the former record year of 1957-58 when 2,590 fires burned 20,253 acres or .18% of the protected acreage. This might also be compared with the 1963-64 fiscal year when 3,817 fires burned 34,752.2 acres. The average size fire for the past year was 7.7 acres.

The leading causes of fires in order of importance were careless smokers causing 29.3% of the total fires, incendiary or intentional fires started 25.0%, and debris burning accounted for 24.3% of all fires in the state last year.

Weather conditions during the spring fire season when heaviest losses usually occur were generally favorable. Rainfall was above normal and was well distributed. January, February, and March were the worst months for fire occurrence and acreage loss.



Counties with heavier losses last year included Berkeley with 165 fires burning 1,825.2 acres, Florence 145 fires and 1,101.0 acres, Horry 123 fires and 1,745.3 acres, and Orangeburg with 147 fires burning 2,296.7 acres. Counties experiencing lighter losses were McCormick with 7 fires burning 45.5 acres, Newberry 10 fires and 13.3 acres, Saluda 10 fires and 31.2 acres, and Union with 20 fires burning 55.6 acres.

Recorded precipitation in South Carolina during fiscal year 1964-65 was over sixteen inches more than the previous fiscal year. The 70.00 inches of rainfall recorded at the 46 fire danger measurement stations in the state represent a departure from normal of 24.54 inches above the long-time average. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

<i>Month</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
July, 1964 -----	11.31	+ 5.55
August, 1964 -----	8.79	+ 3.49
September, 1964 -----	4.25	+ .86
October, 1964 -----	9.38	+ 6.66
November, 1964 -----	1.69	— .85
December, 1964 -----	4.79	+ 1.30
January, 1965 -----	1.78	— 1.52
February, 1965 -----	5.90	+ 2.28
March, 1965 -----	8.12	+ 3.85
April, 1965 -----	3.97	+ .37
May, 1965 -----	2.12	— 1.26
June, 1965 -----	7.90	+ 3.81
<hr/>		<hr/>
TOTAL -----	70.00	+24.54

A five-year summary of precipitation by fiscal years is shown below:

<i>Year</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
1960-61 -----	55.00	+ 6.17
1961-62 -----	51.27	+ 2.44
1962-63 -----	50.03	+ 3.47
1963-64 -----	53.93	+ 8.47
1964-65 -----	70.00	+24.54
<hr/>		<hr/>
Average -----	56.04	+ 9.01

Forest Management

The forest management program has remained at about the same level of operation for the past five years. The major emphasis of the Commission's management program was directed toward assisting small private owners in the management of their woodland properties. The lack of forest management on these properties remains the No. 1 forestry problem in South Carolina.

The 1957 Forest Survey shows 77 percent of South Carolina's woodland owned by small private landowners; public ownership was 9 percent and industry ownership 14 percent.

Technical forestry personnel of the State Commission of Forestry offers forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to improve the stand, maintain it in a productive condition, harvest timber products or any reforestation work necessary on idle or understocked areas. Also included are recommendations for protection from fire, insects and diseases.

During 1964-65 the Commission had a total of 25 men devoting full time to the forest management program, including the small watershed activities. These 25 men assisted 1,814 landowners with primary forest management plans and handled 1,534 requests for the Agricultural Stabilization and Conservation Service. One hundred three field inspections of Conservation Reserve plantings were made. These men also marked 423 tracts covering 12,135 acres amounting to 14,524,606 board feet and 13,288 cords. There were 11 active watershed projects on which critical area planting and gully control work was carried out.

The personnel were just able to keep up with requests from landowners for forest management assistance. In some areas requests could not be handled for two to four weeks after being received.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowners to employ a private consulting forester. Commission foresters also work closely with industry foresters who give direct assistance to landowners.

Landowners continue to receive reasonably good prices for selectively marked sawtimber and pulpwood. The demand for all forest products was steady and prices remained firm.

The southern pine beetle epidemic which killed an estimated one hundred million board feet of timber in 1962 subsided and remained at an endemic level; however, a few hot spots remain and control efforts and surveillance are being maintained.

The Commission continued to work with Clemson University on a number of research studies. No new projects were undertaken.

The Management Branch continued to train qualified rangers on some non-fire jobs such as insect and disease control activities and some phases of the A.S.C. Program. One additional county, Orangeburg, employed a technical forester as Forester-Ranger. Edgefield and Chester Counties already had employed foresters. These technical rangers handled not only fire protection work but the forest management assistance program for the county. It is expected that some additional counties will employ technical men to administer the fire protection program and to handle the management assistance work in those counties. These replacements are added as certain ranger jobs become vacant due to resignations, retirement, etc.

The State Commission of Forestry continued to operate four state forests. Combined area of these state forests represents about one percent of the total forest area of the state. Experimental and demonstration work and all forms of forest management activities were continued on these forests. Approximately eight percent of the total land area in the state forests is still unproductive and major emphasis in management continues to be directed toward reforestation of these non-productive areas. The special program to speed up rehabilitation of unproductive scrub oak lands on the state forests continued to make good progress. Almost 34,000 acres have been cleared and reforested since the program was authorized five years ago. All of this work is accomplished with receipts from state forest timber sales, rentals, etc.

The four state tree nurseries were in operation in 1964-65, however, the Ridge Nursery operation was on a limited basis. The Ridge Nursery was reduced to a standby basis in May 1965. Small lots of trees and cover crop seed for other nurseries will be produced here in 1965-66.

Some of the new programs initiated by the federal government such as "Rural Area Development," "Appalachia" and related programs, required some time of technical personnel.

MANAGEMENT ASSISTANCE

The 25-man-years of forest management technical time of field foresters was directed toward assisting private landowners with their woodland management problems. The three Clemson University Extension Foresters assisted in this program, primarily with promotional and demonstration effort.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, insect and disease control and protection and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is 75 cents per thousand board feet and 25 cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the Coastal Plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seedbed preparation, control of "brown spot" disease of longleaf pine and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis with the landowner of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

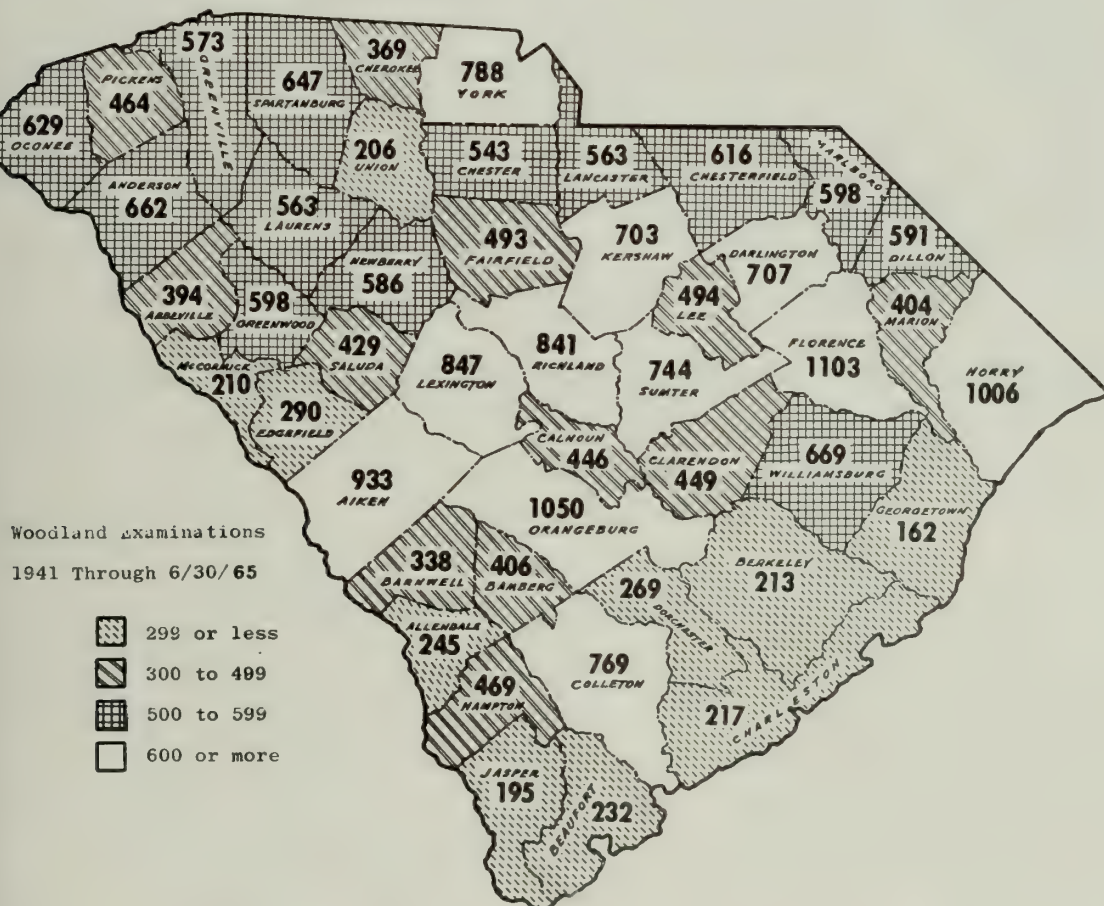
During the year, Commission foresters made 1,814 examinations of 195,283 acres of forest land, and selectively marked 14,524,606 board feet and 13,288 cords for 423 landowners on 12,135 acres of forest land.



A Forestry Commission forester points out advantages of thinning to a landowner as they do a follow-up inspection of a timber operation.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and District Office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,500 telephone calls regarding insect and disease control and made more than 606 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.

Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to control the undesirable or worthless brush or trees in a stand and increase or release the more desirable trees. This cull tree removal program is probably the largest single forest management problem facing South Carolina woodland owners.



Field foresters of the Commission are responsible for checking all areas where landowners request forest practices to be carried out on their property under the Agricultural Conservation Program. In 1964 a total of 1,534 landowners accomplished one or more forestry practices under the Agricultural Conservation Pro-

gram. A total of 1,597 field checks were required and made by Commission field foresters.

Commission foresters were able to service requests for assistance with not more than about one month's delay on any requests. Most projects had one to four weeks work scheduled ahead. There was a slight decrease in ACP requests, however. The increase in new programs initiated at the national level is requiring time of the local CFM foresters.

CONSULTING FORESTER ACTIVITY

Commission and Extension Foresters continued to follow the practice of referring all larger jobs to consulting and industry foresters wherever practical. Our records show 250 jobs referred to consulting foresters and 25 jobs referred to industry foresters during the year where properties were examined by Commission or Extension personnel. It is estimated that more than 100 jobs were referred to consulting foresters through contact with Commission and Extension foresters but where no field work was done by Commission personnel.

The Commission again assisted consulting foresters to arrange their annual training school.

UTILIZATION

Sawtimber and Pulpwood Stumpage Prices for South Carolina— Five Year Period*

Fiscal Year	Weighted Average Stumpage Price Per M Board Feet Scribner Tree Scale	Weighted Average Stumpage Price Per Standard Cord
1960-61 -----	\$36.93	\$6.37
1961-62 -----	33.89	6.43
1962-63 -----	32.56	6.24
1963-64 -----	32.05	6.60
1964-65 -----	34.89	6.88

* Sales of timber worked by Commission Foresters on private property.

Sawtimber and pulpwood prices remained steady during the year. Prices and demand were more firm than any time since 1957. More hardwood demand was evident for both sawtimber, veneer and pulpwood. Exact figures are not available on saw-

timber production; however, the estimated production figure is up from 1963.

There was no appreciable expansion in sawmills in the state during 1964-65. Some existing mills made improvements both on quality and quantity of manufactured items. The use of slabs and other sawmill residues for pulpwood chips continued to increase.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired full-time or part-time foresters.

The pulp and paper companies continued to furnish the services of their foresters to assist landowners with proper thinning of pulpwood. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

A three-day training school was held in May for all technical men in an effort to keep these men informed on new developments in forestry. Emphasis was placed on utilization and economics this year.

One-day schools were held for district personnel to discuss developments and problems concerning insect and disease control. The Clemson University Entomologist assisted with this training.

COOPERATIVE FOREST MANAGEMENT

During the year 22 cooperative forest management projects were operated in the state. The total technical man-years devoted to forest management activities, including Cooperative Forest Management, Agricultural Stabilization funds, Conservation Reserve Program and Watershed Program were 24.8.

WATERSHED PROJECTS

A program to control water on the small watersheds and to protect from overflow the bottomlands along the smaller streams was initiated some years ago through Public Law 566. U. S. Forest Service has transferred its responsibilities to the S. C. State



Brush dams gather silt in which love grass and trees can be planted to reclaim badly eroded areas on thirteen watershed projects in the state.

Commission of Forestry through an agreement. There were thirteen Public Law 566 projects in operation in the state and the Pilot Watershed Project was continued.

Preliminary examinations have been made on 30 separate areas to determine the feasibility of beginning new watershed improvement works on these areas. A description of some of the activities accomplished on the thirteen areas of operation follows.

TWELVE MILE CREEK PILOT WATERSHED

The Pilot Watershed on the Twelve Mile Creek in Pickens County continued to operate in cooperation with the U. S. Forest Service and the Soil Conservation Service. A total of 80,500 seedlings were planted on 104 acres of badly eroded and gullied land within the project boundaries (includes some replanting). A number of check dams were built in eroding gullies to help hold the soil until a permanent vegetative cover can be established. These woodland examinations and forest management plans were made covering 250 acres for landowners on the project. On-the-ground assistance was given to 15 landowners in timber marking and insect and disease control. Many tracts were marked for pulpwood thinning by pulpwood company foresters with the project forester checking the work. In addition, recom-

mentations for planting, brush control, insect and disease control, and other measures needed on woodland areas were given to a number of landowners. A total of 4,147 acres have been planted on critical areas in this project.

CONEROSS CREEK WATERSHED PROJECT

The Coneross Creek Project located just west of Walhalla in Oconee County completed its eighth year's operation. A total of 80,000 trees were planted on 89 acres. A total of 40 land examinations were made covering 1,600 acres on the watershed area. With this year's planting, a total of 2,506 acres of critical area has been planted to trees.

BRUSHY CREEK WATERSHED PROJECT

The Brushy Creek Watershed, covering 23,512 acres, has been under treatment since February 1959. Loblolly pines have been planted for flood prevention on 562.5 acres, totalling 498,300 trees. Watershed protection planting totals 372 acres and 369,300 trees. As the project is nearing termination most of the needed treatment measures have been carried out. Tree planting upon completion of the project will be less than original work plan estimates for several reasons. Land originally classed as critical areas and needing watershed protection has been diverted to pasture or agricultural crops, and placed in cover under the Soil Bank Program.

Woodland management assistance was given to 4 landowners on 97 acres.

WATEREE CREEK WATERSHED PROJECT

This was the sixth year of operation for this project. No critical area planting was planned or accomplished. This project is now completed. The total flood prevention—tree planting—amounted to 299 acres and the grand total planting during the past six years was more than 500 acres.

HUFF CREEK WATERSHED PROJECT

The Huff Creek Watershed covering 21,787 acres has been under active treatment for five years. Loblolly pines totalling 139,000 have been planted on 143.8 acres of critical areas for flood prevention by the S. C. State Commission of Forestry. A total

of 1,330,600 pines have been planted on 1,332 open acres by landowners for watershed protection. Landowners have carried out hydrologic stand improvement on 221 acres. A Pilot Forest sponsored by a pulp and paper company has been under management for over four years and serves as a good example of proper woodland practices.

DUNCAN CREEK WATERSHED PROJECT

This was the second year's operation for this project. 79,000 loblolly pine seedlings were planted on 81 acres of critically eroding land. Check dams with love grass were constructed on 70 acres. Other tree planting amounted to 387 acres, bringing the total planted during the two years' operation to 776 acres. Seven woodland plans were made covering 1,560 acres.

THICKETY CREEK WATERSHED PROJECT

This was the third year of operation for this project. Critical area planting was accomplished on 117 acres. Other planting amounted to 90 acres. Check dams, love grass planting and other erosion control work was carried out on 149 acres. A total of 41 farms have had work done totalling 243 acres. Thirty woodland examinations and plans were made covering 1,200 acres of woodland.

During the three years of operation, 476 acres have been planted to trees for watershed protection, 468 acres have been planted on critical areas and management advice and recommendations given to 89 landowners covering 5,765 acres.

HILLS CREEK WATERSHED PROJECT

This was the third year's operation for this project. Seven acres of critical area were treated and planted to trees. Five acres were planted to trees by the landowners. A total of four woodland examinations and plans were prepared covering 598 acres. This project is almost completed. It is expected that work will not be continued in 1965-66.

BIG CREEK WATERSHED PROJECT

This was the second year's operation for this project. No planting was accomplished. Four woodland examinations were made covering 220 acres. This project will require very little critical area work.

THREE AND TWENTY WATERSHED PROJECT

This was the first year for operation of this project. 63,800 trees were planted for flood prevention on 102 acres and 17 acres were treated for gully control. An additional 49 acres were planted for watershed protection by landowners. 18 woodland examinations covering 1,415 acres were made by the project forester.

BROADMOUTH CREEK, BEAVERDAM CREEK AND WILLOW SWAMP WATERSHED PROJECTS

These three watershed project areas have no critical area tree planting and gully control work needed. There is a need for intensified woodland management activities and Commission Foresters are doing this work. 2,417 acres have been planted to trees for watershed protection. Fourteen woodland examinations and plans were made covering 2,592 acres.

FOREST INSECT AND DISEASE CONTROL ACTIVITIES

During the fiscal year populations of the major bark beetles were low. Control action on private land was restricted to individual landowner efforts on small spots. To supplement observations made by field personnel an abbreviated survey of the Piedmont was made on June 24, 1964. It was designed to cover some of the large private woodland holdings not usually observed from the ground. Commission foresters detected very little insect activity in the survey.

Bark beetle populations on U. S. Forest Service land were reported to be low except in Oconee County. There on the Andrew Pickens District beetle infested trees are being treated with chemical or salvaged.

Personnel of the Commission of Forestry conducted a fusiform rust survey during the summer of 1964. The purpose was to get some idea of the distribution and extent of rust throughout the state. Five stands of planted pines, slash or loblolly, between five and ten years of age were checked in each county. The highest percent of infection occurred in stands of pine in the coastal plain which includes the sand hills. Stands with highest percent of trees with stem infection were found in Georgetown, 63% ; Kershaw, 63% ; and Berkeley, 61%. Stands with highest total infection (limb and/or stem infections) were found in Kershaw, 91% ; Aiken, 90% ; Hampton, 80% ; Berkeley, 75% ; and Georgetown, 74%. Foresters predicted that all the stands inspected would pro-

duce a satisfactory volume of pulpwood. They indicated that only seven stands would fail to produce poles or sawtimber because of fusiform rust infection.

Commission foresters made approximately 606 field checks for insect and disease damage. Recommendations were given the landowners regarding treatments necessary to control or check the spread of the diseases or insects. Many additional requests were handled by telephone where a field check was not necessary.

The Commission of Forestry cooperates with the Crop Pest Commission in a forest pest detection system. Two permanent observation areas in each county are checked periodically to determine the presence or absence of specific insects. Observation reports provide a systematic buildup of data on pest occurrence, damage and the relationship of the woodland environment to the pest. Significant spots of insect activity observed on other areas are reported as "casual observations". Twenty-eight non-technical rangers assisted field foresters in making the periodic checks of observation areas.

NURSERIES

Four forest tree nurseries were operated during the year, producing and distributing to landowners 49,009,893 seedlings for planting during the 1964-65 planting season. An additional 11,673,600 seedlings were either produced or brought into the state by others. The cost of seedlings grown at Commission nurseries was \$4.50 per thousand f.o.b. nursery or \$5.50 if the seedlings were shipped to the landowners.

There was a small decrease in the demand for seedlings with a total reduction in seedlings planted from all sources of 1,740,000. It is expected that seedling sales will continue to decrease slightly next year. Since 1928, a period of some 37 years, one billion three hundred forty-nine million (1,349,584,744) forest tree seedlings have been planted in South Carolina.

A forest survey of South Carolina made during 1958 indicates that approximately five million acres will have to be planted if they are to be productive.

FOREST TREE NURSERY ACTIVITIES

The four forest tree nurseries operated by the Commission are: Horace L. Tilghman (near Wedgefield in Sumter County); Piedmont (near Sunset in Pickens County); Coastal (near St. George in Dorchester County); and Ridge (near Trenton in Edgefield County).

Distribution of Seedlings:

During the year a total of 60,683,493 forest tree seedlings were distributed. Of this total 49,009,893 were produced in the four state nurseries. Out of state plantings of state nursery produced seedlings amounted to 818,375.

Loblolly Pine	20,901,249
Slash Pine	23,409,425
Longleaf Pine	3,105,600
White Pine	657,076
Red Cedar	364,834
Yellow Poplar	435,762
Miscellaneous	135,947
Total	49,009,893

In addition to the above seedlings distributed by Commission nurseries, 11,673,600 seedlings were brought into the state by landowners or produced in the state by industry nurseries.

Tables 9 and 10 in the appendix are a record of seedlings distributed by counties and class of ownership. Table 11 shows the total acreage planted by counties and acres in need of planting.

The following table records the number of seedlings distributed in South Carolina by years, including out-of-state seedlings!

YEAR	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (In. Other Sources)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255
1946-47	1,962,600	1,962,600
1947-48	11,356,990	11,356,990
1948-49	30,338,775	30,338,775
1949-50	29,501,955	29,501,955
1950-51	20,615,315	20,615,315
1951-52	16,619,000	16,619,000
1952-53	22,035,850	32,246,298
1953-54	36,210,100	42,852,314
1954-55	35,373,025	45,182,255
1955-56	34,413,550	42,931,755
1956-57	55,753,600	69,658,736
1957-58	60,846,200	93,369,084
1958-59	123,985,000	166,351,000
1959-60	147,146,365	187,516,418
1960-61	145,609,075	158,330,575
1961-62	71,892,420	83,844,470
1962-63	56,191,241	64,201,541
1963-64	51,445,597	62,423,597
1964-65	49,009,893	60,683,493
TOTAL	1,338,606,744	1,361,258,344

Forest Tree Seed Collection:

Each year the Commission collects cones to obtain seed for tree seedling production. The field offices of the Forestry Commission locate private collectors in good seed producing areas to obtain the quotas which are set. This year cones and seed were collected as follows: longleaf pine 15,167 bushels; loblolly pine 5,772 bushels; slash pine 659 bushels; white pine 252 bushels; yellow-poplar 84 bushels; black walnut 121 bushels; redcedar 5 pounds.

The seed extractory was operated for the eighth year with continued good results. The average cost of seed to the state since the operation of the seed extractory is \$1.60 per pound compared to \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Seedling Survival Examination:

After seedlings are outplanted one year by landowners, approximately 10% of the seedlings planted in each county are sampled to determine the over-all state survival rate. Through these examinations, the Forestry Commission can determine steps to take to eliminate future plantation failures on the part of the landowners. This year the over-all state seedling survival rate was estimated at 77% compared to 66% for the previous year.

Research:

Research activities in cooperation with Clemson University were continued. Three new projects were initiated dealing with seed source studies. Two of these studies are concerned with developing better Christmas tree seedling stock.

Forest Tree Improvement:

The program for establishing 150 acres of seed orchard was continued. A total of 4,330 grafted plants have been planted in the Burnt Gin Seed Orchard and 474 grafted plants have been planted in the Coastal Seed Orchard. Of this total 4,304 plants were established during the fiscal year.

During March and April 1965, 6,550 new grafts were made at the four nurseries on rootstock in nursery seed beds and on rootstock planted in the Coastal Seed Orchard. The grafts made this fiscal year should complete 100 acres of seed orchard.



Cuttings from superior trees have been grafted on nursery root stock and planted in 100 acres of seed orchard to produce seed for future superior seedlings.

The selection of superior trees was continued. A total of 37 superior trees were graded and approved for orchard use during the year. Since the tree improvement program was initiated, a total of 117 trees have been graded. During the year plans were made to start a superior tree selection program for longleaf pine so that ten acres of longleaf pine seed orchard can be established.

The Forestry Commission continued as a member of the North Carolina State University—Industry Tree Improvement Program. Membership in this program makes available the services of forest geneticists, who provide the technical services which are necessary in a tree improvement program.

Anticipated 1965-66 Seedling Production:

Planned production of seedlings for the 1965-66 planting season is approximately 51,300,000. Species for distribution will include loblolly, slash, longleaf, shortleaf, Virginia pine, white pine, yellow-poplar, black walnut and redcedar.

STATE FORESTS

Cassatt State Forest -----	462 acres
Harbison State Forest -----	2,202 acres
Manchester State Forest -----	28,830 acres
Sand Hills State Forest -----	92,000 acres
<hr/>	
TOTAL -----	123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally mis-used. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees.

The primary silvicultural objective continues to be the reclamation of the scrub oak stands to pine. This necessitates the complete removal of the scrub oak roots as well as tops to reduce the competition so that pine will survive and grow. Approximately 34,131 acres of scrub oak land have been cleared and replanted to pine since acquisition by the state. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.



More than 34,000 acres of scrub oak have been cleared and planted to pine since acquiring state forest areas.

The 1960 Legislature passed an act enabling the Commission to use receipts from state forests to speed up the reclamation of scrub oak lands. This program enabled the state to clear approximately 5,000 acres during 1960-61; 5,949 acres in 1961-62; 5,893 acres in 1962-63; 6,163 acres in 1963-64 and 3,397 acres in 1964-65.

DEMONSTRATIONS AND MEETINGS

Several large group meetings were held at the state forests to show some of the results of research and experimental work. In addition, a large number of individuals and small groups visited the areas.

PAYMENTS TO COUNTIES

Twenty-five percent of the gross receipts of all state forest operations are paid to the counties in lieu of taxes. This year's payment by counties was as follows:

Chesterfield (Sand Hills State Forest)	\$ 46,868.00
Sumter (Manchester State Forest)	36,730.86
Richland (Harbison State Forest)	5,159.20

In the past eight years the Forestry Commission has paid a total of \$485,415.11 to counties where state forest lands are located, as follows:

Chesterfield	\$264,306.20
Sumter	194,526.75
Richland	25,684.80
Kershaw	897.36

The forester who was employed to coordinate research and experimental work for the Commission was continued this year. Most of the Commission's research efforts were through cooperative studies with either Clemson University or Southeastern Forest Experiment Station.

CASSATT STATE FOREST

The area comprising this forest lies about two and one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a fire tower and dwelling for the towerman were erected. Also, a small amount of pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained annually a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property.

All of this forest is now in production and only a small amount of timber stand improvement work is needed to maintain a good state of production.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires burned on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the 18 years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a substantial amount to the state treasury. This year 160,042 board feet of sawtimber and 1,017 cords of pulpwood were sold which brought in a total of \$20,636.81.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the federal government. Fee title to this property was received by the state on June 28, 1955. A survey was completed for approximately 90 percent of the boundary lines during the last five years. Approximately 8 percent of this forest is still in an unproductive state. It is on this area that the major silvicultural activities are being directed. Most of the old fields except those being farmed have been planted. The clearing of worthless scrub oak lands and planting to pine is proceeding rapidly and will be completed within the next one or two years.

Seven hundred-six acres of land were rented for agricultural purposes during the year. Some of the tenants renting this land work part-time on the forest.

In addition, 131 acres of newly-cleared scrub oak land were rented for one season to watermelon growers.

Tree Planting:

A total of 704,200 trees was planted on the forest during the year consisting of 500,000 slash, 200,000 longleaf and 4,200 miscellaneous species.

Forest Products Sold and Other Receipts, 1964-65:

Sawtimber—1,745,458 board feet	\$ 94,068.37
Pulpwood and posts—5,448 cords	46,534.29
Rentals, leases and miscellaneous	6,320.80
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TOTAL RECEIPTS	\$146,923.46

Silvicultural Practices:

With the aid of funds made available by the 1960 Legislature, the major job of reclaiming scrub oak lands proceeded on schedule. 750 acres were cleared by root raking and 1,200 acres were plowed. Of the 1,200 acres plowed, 131 were rented for watermelon production. The total amount cleared of scrub oak and planted to pine on this forest is now 7,576 acres. 134 acres were treated with mist blowing, 86 acres treated for hardwood control by other methods and 371 acres prescribe burned.

Monthly checks were made for insect and disease damage. Research in cooperation with the Southeastern Forest Experiment Station is being continued.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester State Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, damage will be confined to a few hundred acres.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a wildlife refuge, but the State Commission of Forestry handles fire protection and forest management ac-

tivities on the entire 92,000 acres. This area is leased from the federal government on a 95-year lease.

Before the area was acquired by the government, it was heavily cut over, badly burned and generally abused. As a result, major activities have consisted of tree planting, fire protection, and other practices aimed at building up the productivity of the land and increasing the forest stand. The reclamation of this scrub oak land is the major silvicultural objective at the present.

Tree Planting:

Most of the longleaf was planted on the Fish and Wildlife Refuge portion of the property. Most areas were machine planted, although some hand planting was necessary in rough cleared areas and on experimental plots. The total planted on the forest during 1964-65 was 4,429,000 seedlings; (2,019 slash pine, 2,401,000 longleaf pine, 7,440 miscellaneous species).

The total planted on the forest since its establishment amounts to 32,217,000 seedlings. Approximately 30,500 acres have been successfully reestablished to pine.

Forest receipts for the year are listed below:

Forest products	\$174,217.02
Watermelon land rentals	8,471.00
Other agricultural lands and miscellaneous receipts	3,130.00
Hunting permits	1,654.00
TOTAL	\$187,472.02

Recreation:

The Sugar Loaf Mountain area was closed in the spring of 1965 to allow trees, grasses and shrubs planted there a chance to become established. This was necessary to control the rapidly eroding hillside. The area around the lake continued to receive heavy use. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and latrines. The fifteen Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area. The lake is open to fishing but no swimming is allowed.



Food patches are planted and maintained on state forests for deer, dove and quail—



and hunters reap the benefits in successful hunts.

The State Park Division continued to maintain Campbell Lake State Park, which attracted many visitors during the year.

Fish and Wildlife:

Hunting and fishing is conducted in season by permit on the forest area. Close cooperation by the Commission of Forestry, the State Wildlife Resources Commission and the Sumter County Game and Fish Association prevails. Deer, dove and quail food patches are planted and maintained by the Commission of Forestry.

Fishing is allowed in Sexton's Pond, Sugar Loaf Mountain Lake and Campbell's Lake.

Dove hunting was permitted on the state forest portion of the Sand Hills State Forest. Nine hundred seventy-seven permits at \$1.00 each were issued. In addition to the dove hunts, the area was opened to quail and squirrel hunting. One hundred fourteen daily quail permits at \$1 each and 73 season permits at \$5 were sold. One hundred ninety-eight squirrel permits at \$1 each were issued. Rye, peas and millet were planted and maintained for game food.

State Parks

SUMMARY

The fiscal year 1964-65 marked the first full year of our state parks' operation under the restricted use established by the 1964 Legislature. Restricted as they were, the parks were operated with no incidents to mar the limited recreational services offered the people of South Carolina.

The Beaufort County Delegation exercised their right, as set forth in the Legislative Act, and had public swimming re-activated at Hunting Island State Park. The summer season of 1965 saw the return of full and complete use at our seven organized group camps with resulting increased use.

The revised operating plan together with the minor changes in "Park Rules and Regulations" is meeting with general public approval.

The inadequate operating budget for 1964-65 was greatly aided by a late deficiency appropriation. No new funds were appropriated for capital improvements. There is encouraging evidence that the 1965-66 appropriation for state parks will be more realistic.

The increased demand on recreational facilities and the build up of delayed maintenance is becoming a serious problem. This may be met in some degree by taking advantage of the federal funds available on a matching basis through the Land and Water Fund Act. Of the \$76,000,000 apportionment presently available \$1,157,201 is apportioned to the State of South Carolina. Of this amount the state parks might well qualify for the major portion.

A detailed study is now being made to update the state parks' facility inventory, and to reappraise additional needs to meet our obligations in furnishing ample state park recreational facilities. The federal requirement of an approved "Statewide" recreation plan which embraces all segments of available recreation facilities is planned to be completed late this year. Following this, individual projects for acquisition, planning and development may be submitted for matching federal funds from the state's apportionment. Plans are to be ready to qualify for such amount as the Legislature will make available.

Of particular interest was the passage by the 1965 Legislature of the Act which enables the Forestry Commission to institute

a seven year program for Scrub Oak Eradication, Reforestation, Timber Stand Improvement and Harvest Cutting on the State Parks of South Carolina. The following is a complete text: (R552, H1203)

An Act To Authorize The State Commission Of Forestry To Expend Certain Monies For Scrub Oak Eradication, Reforestation, Timber Stand Improvement And Harvest Cutting On The State Parks Of South Carolina.

Whereas, the General Assembly of the State of South Carolina, recognizing that the forest lands on the State Parks of South Carolina are a natural resource of great economic value to its citizens and the State as a whole; and

Whereas, continuously increasing demands for timber necessitates that public owned areas, as well as private lands, be brought to their full productive capacity without further delay; and

Whereas, there are some thirty thousand acres of woodland or potential woodland on the twenty-three State Parks in South Carolina which are outside of the immediate needs for recreational use and which could produce substantial revenue for the State without the loss of any recreational values to the State Park system, and that nine parks have over one thousand acres each that could be devoted to timber production; and

Whereas, a very rough estimate indicates that some five hundred thousand dollars in timber value could be marked and sold within the next ten-year period (approximately fifty thousand dollars per year) without impairing timber production or recreational values, there being approximately five thousand acres of State Park lands that should be planted to trees (about three thousand acres of which will need site preparation work before planting) and an additional two thousand acres will need timber stand improvement work; and

Whereas, if these additional seven thousand acres were placed in a good state of production the total production of timber from the State Parks could be increased by approximately thirty-five thousand dollars annually at present day prices, which, when added to increased production from the remaining twenty-three thousand acres already in production, would add up to substantial net revenue to the State; and

Whereas, this forest management work can be accomplished without impairing the value of the State Parks for recreational

purposes and, in fact, will increase recreational values in certain areas. Now, therefore,

Be it enacted by the General Assembly of the State of South Carolina :

SECTION 1. The State Commission of Forestry is hereby authorized to expend annually an amount not to exceed one-half the total receipts derived annually from the State Parks (sale of timber products only) under the administration of the Commission in order to commence a program not exceeding seven years to carry out scrub oak eradication operations, timber stand improvement and other management activities on State Park lands and for the reforestation of such treated areas. Provided, the State Commission of Forestry shall first expend such funds as are derived hereunder for necessary reforestation projects and fixtures within the park from which timber has been cut and only thereafter shall such funds be expended on other State Parks. The other half of the total receipts derived annually from the State Parks and all unexpended funds, at the end of each fiscal year, heretofore herein authorized to be spent by the State Commission of Forestry for the purposes herein stated, shall be deposited to the general fund of the State. Provided, the State Treasurer shall pay to any County containing State Park lands an amount equal to twenty-five per cent of the gross proceeds received by the State in each fiscal year from the sale of timber, pulpwood, and other timber products on such State Park lands in any such County, which said payments shall be in lieu of taxes. This provision shall apply to all State Park lands managed or operated by the State Commission of Forestry whether they be owned in fee by the State or leased from the United States and irrespective of Section 29-29 of the Code of Laws of South Carolina, 1962. Where a particular State Park lands lies in more than one County, the funds derived from such State Park lands and to be paid by the State Treasurer shall be apportioned on the basis of land acreage involved. All funds distributed under the provision of this section shall be spent upon the approval of a majority of the County legislative delegations, including the Senator. The Commission may enter into contracts with such persons as may be necessary in order to carry out the provisions of this act. All timber shall be cut consistent with good forestry practices and such cutting shall not impair the value of the State Parks as to beauty or for recreational purposes and no such

timber shall be cut without the approval of the State Budget and Control Board.

SECTION 2. The program herein authorized shall commence as soon as is practicable after the effective date of this act. Provided, that no expenditures or contracts authorized by this act shall be made without the approval of the State Budget and Control Board.

SECTION 3. This act shall take effect upon approval by the Governor.

In the Senate House the 4th day of June

In the Year of Our Lord One Thousand Nine Hundred and Sixty-Five.

Edgar A. Brown,

President Pro Tempore of the Senate.

Solomon Blatt,

Speaker of the House of Representatives.

Approved the 8th day of June, 1965.

Robert E. McNair,

Governor.

Printer's No. 140—S.

ATTENDANCE

A detailed tabulation of park use together with often repeated complaints of the use restrictions by park visitors revealed sev-



Family camping continued to be a favorite state park activity even though other activities which usually attract campers were restricted.

eral reasons for the decrease in attendance to less than one-half of the normal use as only 1,432,139 users were recorded. The most common complaint of park visitors was of the swimming restriction, followed by campers not being allowed to camp at Myrtle Beach and Santee State Parks.

Myrtle Beach with attendance of 352,632 and Hunting Island (the only park with authorized swimming) with attendance of 236,820 were the most heavily used parks, but were only hosting one-half of normal unrestricted use. All other parks recorded a like percentage of decrease in attendance.

REVENUE

The year 1962-63, the last full year of operation with unrestricted facility use, enabled park receipts to total \$139,207.73. With restrictions on swimming, the use of family cabins and family camping at Myrtle Beach and Santee State Parks, the 1964-65 annual park receipts totaled only \$25,210.56, an 82% decrease of \$113,997.00. This loss in revenue amounted to 35% of the total 1964-65 appropriation.

APPROPRIATION

As previously mentioned the 1964-65 budget appropriation in the amount of \$278,094.00 was supplemented late in the fiscal year by \$48,550.00. This late addition of funds, although too late to aid materially with the annual maintenance, did provide the opportunity to acquire some badly needed maintenance supplies. It also allowed for the replacement of worn out equipment and for better equipping some of the parks workshops. It is believed and hoped that the budget appropriations for 1965-66 will be more realistic and allow for badly needed personnel replacements.

FAMILY VACATION CABINS

Again the nearly 1,000 fortunate families that would normally have enjoyed the 65 state park vacation cabins had to seek cabin facilities elsewhere as their prohibited use by Legislative Act was not rescinded.

HISTORICAL AREAS

The seven historical areas, which the Division of State Parks has the immediate responsibility of maintaining and supervising, continues to attract more visitors each year.



Attractive historical markers helped to increase visitation to the seven historical areas maintained by the Division of State Parks.

The increased visitation to these interesting historical sites is due in some measure to the attractive and informative cast aluminum historical markers which have been appropriately placed recently. Additional state highway directional markers are greatly aiding in guiding the interested public to these areas.

Restoration work continues at Rose Hill, the antebellum mansion of the Secession Governor, William Henry Gist. The second floor, on which is located the beautiful ballroom, and the third floor were completely repainted, and lovely new drapes grace the four windows of the first floor parlor. The formal gardens reflect the great amount of work and care given them.

The normal amount of face lifting is being carried on at all areas.

The separate annual 1964-65 budget appropriations of \$24,295.00 for the supervision, maintenance and restoration of these areas required careful consideration in area budgeting to meet the recurring expenses and minor improvement requirements. The budget, however, was ample to meet the immediate needs.

SUMMARY OF STATE PARK USE — JULY 1, 1964 — JUNE 30, 1965
S. C. STATE COMMISSION OF FORESTRY — DIVISION OF STATE PARKS

NAME OF PARK	Family Cabin Occupants	Group Campers	Tent & Trailer Campers	Fishermen	Picnickers	Swimmers	Out-of-State Cars	Total Cars	Total Visitors
Aiken	923	2,201	16,771	.....	833	5,062	19,860
Andrew Jackson	2,751	.....	2,668	5,795	18,026
Barnwell	328	.....	14,996	.....	1,164	6,933	31,203
Cheraw	2,575	7,111	10,985	11,024	.....	3,460	16,219	72,004
Campbell Lake	285	963	.....	104	576	2,656
Chester	134	71	6,220	.....	862	7,268	29,172
Croft	2,093	.....	185	.....	1	1,367	3,118
Edisto
Givhans Ferry	1,498	.....	7,300	.....	729	5,504	20,321
Greenwood	5,944	2,776	16,856	.....	1,016	17,061	68,598
Hunting Island	9,892	11,665	33,670	48,343	12,540	65,078	236,820
Huntington Beach	7,374	4,277	.....	3,542	24,432	97,727
Kings Mountain	9,519	4,685	416	12,690	.....	11,656	19,403	102,411
Lee	282	1,512	2,060	.....	111	2,970	11,980
Little Pee Dee
Myrtle Beach	2,540	2,223	8,057	.....	1,332	7,417	20,522
Oconee	1,103	17,507	9,925	.....	30,886	89,623	352,632
Old Dorchester	196	6,497	.....	356	3,344	14,511
Paris Mountain	2,354	6,175	25,242
Pleasant Ridge	2,243	1,357	806	43,145	.....	829	23,894	96,842
.....	450	119	4,522	.....	109	1,652	7,156
Poinsett
Mill Creek	3,398	1,489	221	5,562	.....	1,188	5,416	23,188
Rivers Bridge	2,482	.....	23	1,382	.....	43	972	6,108
Santee	12	1,515	565	2,525	.....	659	2,817	10,881
Sesquicentennial	6,871	.....	.....	2,334	9,293	39,575
Table Rock	3,361	174	18,055	.....	4,388	16,075	59,023
Colleton Wayside	4,625	689	24,377	.....	1,870	13,293	49,685
.....	494	.....	7,422	.....	2,419	4,052	12,878
TOTALS	20,229	49,824	66,689	261,232	48,343	86,453	361,691	1,432,139

TABULATION OF ANNUAL PARK USE
1936-37 to 1964-65

1936-37	227,280
1937-38	478,617
1938-39	494,850
1939-40	584,150
1940-41	830,156
1941-42	1,053,057
1942-43	531,415
1943-44	546,165
1944-45	545,906
1945-46	808,207
1946-47	1,242,633
1947-48	1,562,260
1948-49	1,383,779
1949-50	2,089,712
1950-51	2,578,259
1951-52	3,378,091
1952-53	3,130,694
1953-54	3,207,094
1954-55	3,066,971
1955-56	2,893,996
1956-57	3,248,891
1957-58	3,069,393
1958-59	3,067,679
1959-60	3,181,189
1960-61	3,324,276
1961-62	3,186,416
1962-63	3,306,501
1963-64*	1,846,016*
1964-65	1,432,139
<hr/>	
TOTAL	56,295,792

* Parks were closed September 8, 1963.

Parks were reopened June 1, 1964 on a restricted basis by Legislative Act.

Information and Education

INTRODUCTION

South Carolina's 12 million acres of forest land provide an annual return of more than a third of a billion dollars in growing, harvesting, manufacturing, transporting and sale of forest products.

The needs of our ever increasing population demand that each forest acre produce the maximum amount of usable wood fiber, protect soil and water supplies, and provide for the recreational needs of the citizens of the state.

Every employee of the Commission of Forestry has a part in the educational program designed to reach each South Carolinian. Through various means citizens are made aware of their responsibilities in conserving our natural resources so that present and future generations may use and enjoy them to their fullest.

Supporting the state's third largest industry, our woodlands provide a livelihood for thousands of people. Yet the state's woodlands are producing less than half of their potential capacity. The aim of the Commission's educational program is to help the landowners and people of the state realize the potential value of our woodland and apply the necessary conservation practices that will help double the timber production.

Points of emphasis in the Commission's information and education efforts in promoting wise land use are:

1. Forest fire protection: more than 2,442 illegal woods fires burned during the year in South Carolina, with 99% being caused by people.
2. Unwise cutting practices mean low production and inferior forest products.
3. Trees should be planted on more than five million acres of idle or unproductive land.
4. Improvement of the quality of many existing stands of timber throughout the state by removing inferior species as well as low grade and poor-quality trees.
5. Full appreciation should be developed in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of South Carolina.



WONDERFUL THIN
WONDERFUL TODAY

KEEP IT THAT WAY

GUARD OUR FORESTS
AGAINST
WILDFIRE

EACH DAY AND MONTH OF 1965 MATCHES 1897 EXACTLY

JANUARY, 1897

SUN MON TUE WED THU FRI SAT

**SOUTH CAROLINA
STATE COMMISSION OF FORESTRY**

County rangers and wardens help distribute wall calendars and 50,000 pocket calendars as a part of South Carolina's forest fire prevention efforts.

FOREST FIRE PREVENTION

In the Commission's 1929 Annual Report, Lewis E. Staley, then State Forester, said, "While light burning may not kill the larger trees, unquestionably the basis for future forests—the baby trees—are practically all destroyed. This is an indisputable fact." To this day, it is upon this "indisputable fact," *that even little fires kill little trees*, that the primary approach of the Commission to forest fire prevention is based. Through a program beginning with personal contacts the need for preventing wild-fires is brought to the attention of every man, woman and child in the state. Personnel of the Commission, in addition to the basic personal contact, utilize other media of communication such as posters, pocket and wall calendars, roadside signs, exhibits, publications, illustrated talks, newspaper articles and radio and television programs to bring the conservation message to each citizen of the state.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The Cooperative Forest Fire Prevention Campaign supplements local materials and programs with those published or produced in cooperation with the federal government and other states. It reinforces local efforts to reach, in one way or another, every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, a non-profit organization, in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services free of charge in preparing materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, book-marks, newspaper ads, radio platters, TV spots, films, and other materials to bring forest fire prevention information and reminders to men, women and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message, provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear pocket flash-

PLEASE!



Only you can prevent forest fires

U.S. Department of Agriculture—Forest Service

65-CLIP-90

State Forestry Department

Commission personnel throughout South Carolina are active in helping distribute posters, bookmarks, booklets, stuffers and many other items as a part of the national Cooperative Forest Fire Prevention Campaign.

lights, wallets, moccasins, T-shirts, scarfs, fishing tackle, archery sets, cigarette snuffers, belts, figurines, salt and pepper shakers, handkerchiefs, balloons, coloring books, comic books, story books, bubble bath, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls and other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Feeling the need for a more southern slant than the national campaign can provide, the states and the U. S. Forest Service in the southern region have continued to cooperate in the production of forest fire prevention materials with a southern flavor. The sixth year's operation of the southern program saw continued production of recorded radio spots, a series of TV spots, news ads, and a poster, all of which are currently being distributed. The southern materials supplement the national materials to intensify and strengthen forest fire prevention efforts in South Carolina.

SCHOOL PROGRAMS

School children throughout the state received basic information on forestry and forest fire prevention from foresters, rangers, and wardens of the Commission of Forestry. Some 1,039 programs were held in the fifth and sixth grades, where schoolyard demonstrations of fire control equipment and suppression techniques, flip charts and color slides were used to help bring the conservation story to the classroom. In these two grades alone, 53,683 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slide programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations mentioned above, all third grade children throughout the state (more than 70,000) received a copy of the booklet "Smokey Bear's Story of the Forest". An equal number of second grade students received coloring sheets with forest fire prevention and conservation messages. Over 65,000 fourth graders received a color comic book entitled "The True Story of Smokey Bear."

Through the cooperation of the Southern Pulpwood Conservation Association 60,000 copies of a 16-page booklet pointing out

the values of trees entitled "Your Fabulous Friend" were made available to the Commission for distribution to 6th grade pupils. Member mills making this distribution possible are: Bowaters Carolina Corporation; Champion Papers, Inc.; International Paper Company, Southern Kraft Division; Sonoco Products Company; Union Bag-Camp Paper Corp.; and West Virginia Pulp and Paper Co.

Many forestry movies were also shown in schools, bringing conservation information to students of all grade levels.

The Commission's school programs are designed to add to each child's understanding of the total stewardship of life, building toward a stronger and more appreciative community of the future. The program gives basic instruction and information to children on the value of our woodlands and the care needed to make them produce and contribute to an economically prosperous future.

FORESTRY DEMONSTRATIONS

During the year 4,772 persons attended 132 demonstrations conducted by personnel of the Commission of Forestry. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species and timber stand improvement.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson University Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies, and organizations cooperated to make the observance of 1964 Arbor Day and Conservation Week a success. South Carolina Law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 50,000 copies of a special folder were printed and distributed to schools and other interested groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Personnel of the Commission of Forestry and other groups gave numerous talks at meetings held during Conservation Week. Many of the Conservation Week and Arbor Day programs included tree planting exercises.

FIRE PREVENTION ROADSIDE SIGNS

Roadside signs continued to carry three messages in the following sequence: **USE YOUR ASH TRAY—HELP PREVENT WOODS FIRES — PROTECT LITTLE TREES, KEEP SOUTH CAROLINA GREEN.** First erected in February 1953, the fire prevention roadside signs appear on highways throughout the state. The Commission keeps this project going by purchasing additional sets each year and replacing worn out and damaged signs where thousands of motorists will continue to see these forest fire prevention reminders as they travel the highways.

MOTION PICTURES

Motion pictures are a valuable aid in teaching conservation, and films are often used to supplement talks. Each district office is equipped with motion picture equipment which is used for forestry motion picture showings in every county of the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school and church groups, civic clubs, community organizations, woodland owners, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 29,893 people saw motion pictures on forestry at 374 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

In 1930 forestry was added as a course of study in vocational agriculture classes in South Carolina. Each year the Agricultural Education staff of the State Department of Education and the State Commission of Forestry work together to teach vocational agriculture students the importance of forest conservation.

School forest laboratories serve as aids in teaching forestry. They are "outdoor classrooms" where young men learn to do by doing. The students construct firebreaks to protect their

laboratory from fire. They learn to plant trees, eliminate weed trees, select, measure, and estimate merchantable volumes in trees which are to be removed. Timber in need of cutting is sold under contract as the students learn to market forest products. The laboratory is divided into a number of small plots to be worked one a year. One plot is left untreated for comparison with those where good forestry practices are carried out.

In the annual Chapter Forestry Contest sponsored by the Forestry Commission, in cooperation with the State Department of Education, the following FFA and NFA Chapters, in each Vocational Agriculture District, were awarded \$60 and an engraved plaque for outstanding forestry work.

DISTRICT I

Calhoun Falls FFA Chapter
Geer-Gantt NFA Chapter

DISTRICT II

Rock Hill FFA Chapter
New Bethel NFA Chapter

DISTRICT III

Blaney FFA Chapter
Riverside NFA Chapter

DISTRICT IV

St. Stephens FFA Chapter
Elloree Training NFA Chapter

DISTRICT V

Hannah FFA Chapter
Stuckey NFA Chapter

DISTRICT VI

Aynor FFA Chapter
Battery Park NFA

RESOURCE-USE EDUCATION

Resource-use education continues to stimulate interest in the out-of-doors as an aid to effective teaching, as well as a means of instilling conservation concepts.

State park nature trails served effectively as "outdoor classrooms" as forestry and state park personnel worked with many school groups and others in carrying out projects and instruction in the field of conservation.

The resource-use education workshop at the University of South Carolina was discontinued due to the retirement of Prof. Guilbert Graham. The Commission provided instruction in forestry for an advanced resource-use education class at Clemson University.

TALKS

State Commission of Forestry personnel gave talks about forestry and state parks before many groups. The use of color slides with many of the talks helps make them more interesting and more effective.

During the year a total of 272 talks were made by Commission personnel to 11,439 people. Garden clubs, church groups, school groups, and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel passed along information on forestry and state park matters to South Carolinians. Rather singular points of contact between personnel of the Commission and the public are the 138 fire towers where persons visiting saw the work of detecting, reporting, dispatching, fighting and preventing fires explained or demonstrated.



A fully equipped county ranger's pickup was featured in the 1964 State Fair. The South Carolina citizen was cited as a vital member of the county forest fire protection team.

EXHIBITS

Exhibits provide an excellent means of placing forestry and state park information before the people.

More than 1,073,950 people saw forestry and state park exhibits and displays in fairs, parades, and special meetings as follows:

EXHIBITS AT STATE AND COUNTY FAIRS

Location of Exhibit - County Fair	Type of Exhibit	Est. Attend.
Abbeville -----	Commercial Woods of S. C. -----	12,500
Bishopville -----	"It's the Law" -----	5,000
Greenville-Easley -----	Commercial Woods of S. C. -----	25,000
McCormick -----	Commercial Woods of S. C. -----	4,000
Greenville -----	"It's a Wise Man Who Looks Ahead" -----	60,000
Chesterfield -----	Commercial Woods of S. C. -----	5,000
Pickens -----	"It's A Wise Man Who Looks Ahead" -----	20,000
Anderson -----	"It's The Law" -----	70,000
Greenwood -----	Judge Smokey Diorama -----	50,000
Chester -----	"It's A Wise Man Who Looks Ahead" -----	4,000
Newberry-Saluda -----	Commercial Woods of S. C. -----	31,000
Union -----	"It's The Law" -----	35,000
Moncks Corner -----	"It's The Law" -----	5,000
Eastern Carolina -----	Fire Occurrence & Responsibility -----	85,000
Spartanburg -----	Commercial Woods of S. C. -----	85,000
Kershaw -----	Commercial Woods of S. C. -----	4,500
Sumter -----	Planting & Management Translites -----	18,000
Pleasant Hill-Folly Grove -----	"It's A Wise Man Who Looks Ahead" -----	1,000
Chester (N) -----	Judge Smokey Diorama -----	2,500
Laurens -----	Commercial Woods of S. C. -----	22,500
York -----	Commercial Woods of S. C. -----	15,000
Lancaster -----	Smokey's Commandments -----	12,000
Marion -----	Commercial Woods of S. C. -----	11,000
Loris -----	Commercial Woods of S. C. -----	4,000
Dillon -----	Smokey's Commandments -----	4,500
Walterboro -----	Commercial Woods of S. C. -----	4,500
Beaufort -----	Commercial Woods of S. C. -----	5,000
Oakdale Community -----	"It's The Law" -----	1,000
TOTAL, County Fair Exhibits -----		602,000
State Fairs		
Columbia -----	Co. Ranger's Pickup & Equipment -----	150,000
Columbia (N) -----	Co. Ranger's Pickup & Equipment -----	90,000
TOTAL, State Fair Exhibits -----		240,000
TOTAL, Fair Exhibits -----		842,000

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

Folly Grove (Community Fair) Fire Control	5,000
Oakdale (Community Fair) Fire Control	250
Williamsburg (Fire Prevention Parade) Fire Control	200
Columbia (Fire Prevention Parade) Ranger With Smokey	40,000
Shaw Air Force Base (Fire Prevention Parade) Fire Prevention Float	10,000
Pageland (Watermelon Festival) Smokey on Ranger's Truck	25,000
Columbia (Christmas Parade) Fire Prevention Float	125,000
Latta (Skillet Fair) Forest Management Exhibit	2,500
Dillon (Parade) Smokey Float	9,000
Latta (Parade) Smokey Float	5,000
Florence (Fire Prevention Parade) Fire Fighting Equipment	8,000
Aynor (Christmas Parade) Smokey Float	4,000
Loris (Christmas Parade) Smokey Float	5,000
Conway (Christmas Parade) Smokey Float	9,000
Bennettsville (Christmas Parade) Smokey Float	5,000
McColl (Christmas Parade) Smokey Float	1,500
Newberry (Christmas Parade) Fire Control	27,000
Clemson—Forestry Management	1,500
Cherokee (County Office Building) Management and Fire Control	2,000
Hill Crest (School Fair) Forest Management and Fire Control	5,000
Beaufort (Christmas Parade) Smokey Bear	1,000
Hardeeville (Christmas Parade) Smokey Bear	500
Walterboro (Christmas Parade) Smokey Bear	5,000
St. George (Christmas Parade) Smokey Bear	3,500
Hampton (Christmas Parade) Smokey Bear	5,000
Hampton (Watermelon Festival) Smokey Bear	7,000
Ridgeland (Christmas Parade) Smokey Bear	2,000
Langley-Bath-Clearwater (Christmas Parade) Smokey Bear & Equipment	900
New Ellenton (Christmas Parade) Smokey Bear & Equipment	400
Aiken (Fire Prevention Parade) Smokey Bear & Equipment	2,200
Allendale (Christmas Parade) Smokey Bear & Equipment	1,500
Williston (Christmas Parade) Smokey Bear & Equipment	2,500
Barnwell (Christmas Parade) Smokey Bear & Equipment	3,500
Barnwell (Electric Fair) Future Forest Panel	2,500
St. Matthews (Electric Fair) Future Forest Panel	2,000
Swansea (Science Fair) Wood Panel	300
Lexington (Christmas Parade) Smokey Bear & Equipment	7,000
Boiling Springs (Christmas Parade) Smokey Bear & Equipment	1,500
Gilbert (Peach Festival) Smokey Bear & Equipment	9,000
Bowman (Christmas Parade) Smokey Bear & Equipment	2,000
Aiken (Electric Fair) "It's a Wise Man"	2,000
Darlington (Electric Fair) "It's the Law"	1,500
Edisto (Electric Fair) Forestry Equipment Display by Co. personnel	1,500
Charlotte, N. C. (Carolina Lumber & Bldg. Material Dealers Assn.)	2,000
Total Floats and Displays	331,950
GRAND TOTAL, Exhibits, Floats, Displays	1,073,950

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperate generously with the Forestry Commission by providing air time for many programs on forest fire prevention, forest management and other phases of forestry, and on educational and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that at least 392 live or taped radio and TV programs on state parks and forestry were presented during the year. This number does not include the many hundreds of recorded programs and film spots carried by radio and television stations, using material made

available through the National and Southern Cooperative Forest Fire Prevention Campaigns, and spot announcement material prepared by the Commission of Forestry for special use during periods of high fire danger.

COOPERATION WITH OTHER ORGANIZATIONS

The Forestry Commission furnished forest tree seedlings to Kiwanis Clubs throughout the state to publicize tree planting. Forestry Commission foresters presented talks at regular meetings of many Kiwanis Clubs in connection with giving each Kiwanian a tree seedling to plant. Publicity given this project helped spotlight the need and the opportunities for tree planting in South Carolina.

NEWS RELEASES AND ARTICLES

Newspapers provided excellent coverage, placing forestry and state park news before the people regularly.

During the year Commission personnel prepared 612 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, such as during serious fire situations, news items are given orally to individual papers and to the wire services.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or prepared mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

BOYS' FORESTRY CAMP

The eighteenth Boys' Forestry Camp was held at Camp Forest, Cheraw State Park during the year. Ninety-three young men representing every county in the state attended the week-long camp. One boy from each county was selected by each county ranger from postal cards written by boys interested in attending the camp.

On invitation of the Commission, 24 FFA boys were selected by the Vocational Agriculture staff of the State Department of Education, on the basis of forestry activities in FFA chapters in the state. In the same manner 24 boys were selected by the Clemson University Extension Service for forestry activities in the 4-H Clubs.

Again, a group of Explorer Scouts attended camp, acting as junior counselors.

The second Negro Boys' Forestry Camp was held at Mill Creek Group Camp where 43 Negro boys from all over the state attended the week-long camp. Selection of campers was made by the Vocational Agriculture staff from NFA members and the Extension Service from 4-H Club members. In addition to the Commission's supervision staff, additional counselors were selected from Negro Vocational Agriculture teachers and assistant and associate county agents of the state.

Programs of study and recreation were combined to teach conservation to the boys. Studies included forest management and planting techniques, forest fire prevention and control, better utilization of wood on the farm, as well as recreational opportunities offered by state parks.

PUBLICATIONS

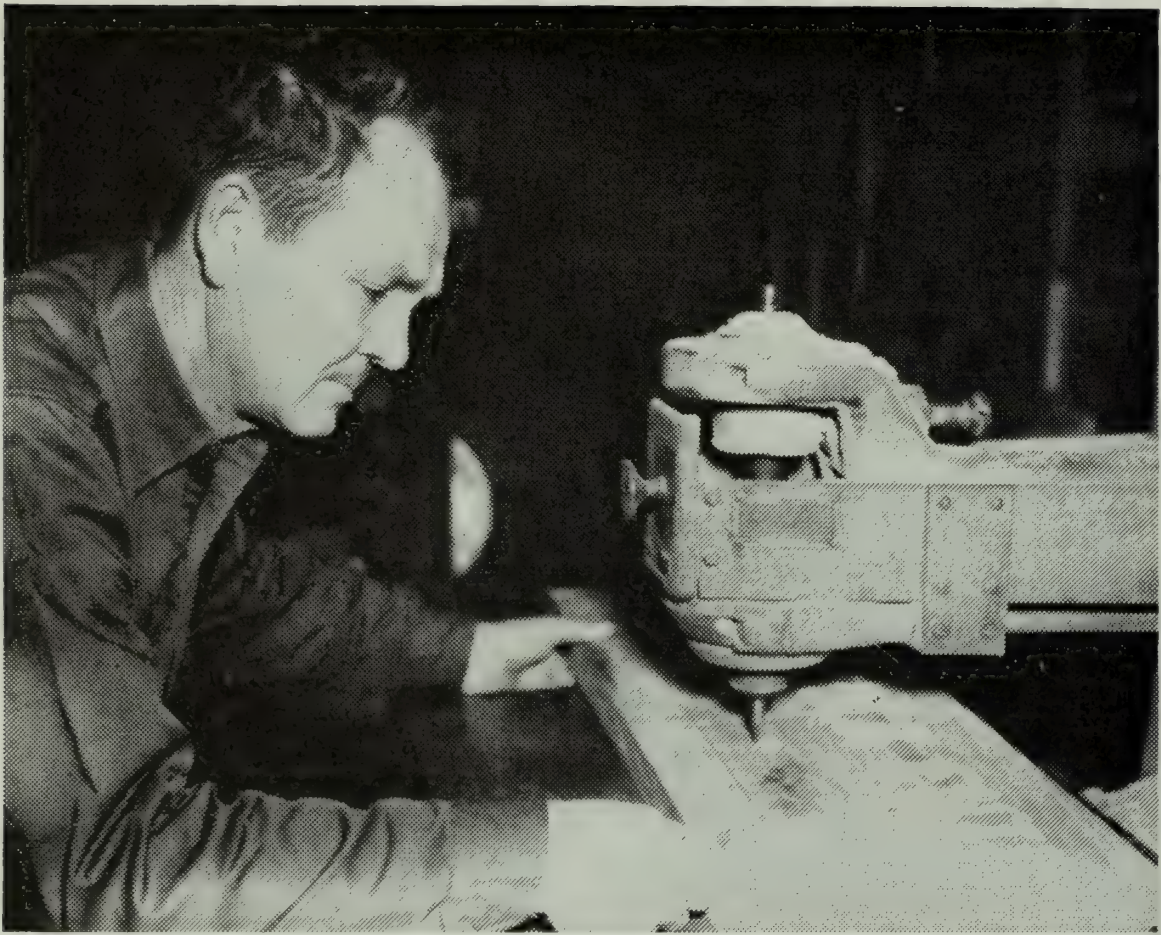
The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson University Extension Service, American Forest Products Industries, Inc., various forest industry companies and associations, and other organizations, groups, and agencies which publish material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park



Routed signs, like the one being made above, serve to identify the Commission's many forestry and state park installations.

installations of the Commission of Forestry. The Commission's exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

Completion of a new sign shop at the Forestry Center on Harbison State Forest made it possible to move the entire sign shop operation from Sumter to Columbia.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owners and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound

cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, the state representative of American Forest Products Industries, Inc., the national sponsor, with the cooperation of the S. C. State Commission of Forestry, the Clemson University Extension Service, and consulting foresters and woodland owners in South Carolina. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program.

As of June 30, 1965 there were 622 Tree Farms in the state, comprising 2,147,092 acres.

APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1964 - June 30, 1965

RECEIPTS

Division of Forestry:

Balance from 1963-64, Forestry Commission—Specials.....	\$ 34,483.04	
Balance from 1963-64, Construction of Forestry Center.....	75,496.35	
Balance from 1963-64, State Appropriation	21,000.00	
State Appropriation—Operating	1,895,854.00	
State Appropriation—Salary Adjustments	61,587.00	
Forestry Commission—Specials, CM Law Sec. 2.....	408,000.00	
Forestry Commission—Specials, CM Law Sec. 4	3,000.00	
Forestry Commission—Specials, Coop. Forest Management	73,911.68	
Forestry Commission—Specials, Soil Bank Title IV Program....	54,300.00	
Forestry Commission—Specials, A. S. C. S.....	17,890.92	
Forestry Commission —Specials, Watersheds	27,504.10	
Departmental Revenue, State Forests, S.O.E.P.....	355,032.29	
Miscellaneous (Radio Coop. Funds)	5,476.08	
Miscellaneous (Tractor Operators Salary)	5,530.74	
Firebreak Plowing	2,339.00	
Nurseries	229,444.60	
Timber Marking	11,544.12	
Miscellaneous	85.00	
Total Receipts—Forestry		\$3,282,478.92
Less Receipts Deposited to Credit of State Revenue Acct...		265,640.74
Total Receipts Available for Expenditures.....		\$3,016,838.18
Total Expenditures		2,991,293.61
Balance—Division of Forestry		\$ 25,544.57*

Division of State Parks:

Balance from 1963-64, Forests and Parks Fund.....	\$ 7,023.30	
Balance from 1963-64, Parks Improvement	13,180.61	
Balance from 1963-64, Myrtle Beach Fishing Pier	6,556.81	
Balance from 1963-64, Myrtle Beach Swimming Pool.....	1,464.34	
Balance from 1963-64, Myrtle Beach Pier and Park, etc.....	65,012.53	
Balance from 1963-64, Huntington Beach—Special	17,165.37	
Balance from 1963-64, Chester Park—Special	23,842.85	
State Appropriation—Operating	278,033.00	
Deficiency Appropriation—Operating	48,550.00	
State Appropriation—Historical Areas	24,295.00	
Forest and Parks Fund, Hunting Island Deposits.....	1,695.00	
Forest and Parks Fund, Santee Boat Landing.....	1,335.69	
Myrtle Beach Fishing Pier.....	15,381.48	
Cabin Rentals	300.00	
Picnic Table Fees	3,202.42	
Boat Rentals	2,669.60	
Picnic Shelter Fees	2,485.95	
Recreation Building Rent	720.46	
Group Camps	7,083.63	
Day Camp and Trailer Fees.....	7,973.40	
Miscellaneous, Timber Sales and Sales Tax.....	775.10	
Total Receipts—Parks		\$ 528,746.54
Less Receipts Deposited to Credit of State Revenue Account		25,210.56
Total Receipts Available for Expenditures.....		\$ 503,535.98
Total Expenditures		380,464.32
Balance—Division of State Parks.....		\$ 123,071.66†

EXPENDITURES

Administrative and Technical	\$ 751,016.41	
State Forestry Nurseries	276,903.45	
State Forests	256,730.60	
Fire Protection	1,459,948.74	
Construction of Forestry Center.....	75,496.35	
25% Payment to Counties (3).....	88,758.06	
Payment of Loan to State Sinking Funds and Property	82,440.00	
Total—Division of Forestry.....	\$2,991,293.61	
Total—Division of State Parks.....	\$ 380,464.32	
GRAND TOTAL—Expenditures		\$3,371,757.93

RECAPITULATION

Funds Available:

Division of Forestry	\$3,016,838.18	
Division of State Parks	503,535.98	
		\$3,520,374.16

Expenditures:

Division of Forestry	\$2,991,293.61	
Division of State Parks.....	380,464.32	
		\$3,371,757.93
		*
Balance		\$ 148,616.23†

Balances:

* Forestry: Forestry Commission—Specials	\$ 25,544.57	
† Parks: Forests and Parks Fund.....	9,628.91	
Parks Improvements	9,588.96	
Myrtle Beach Fishing Pier.....	3,535.09	
Myrtle Beach Swimming Pool.....	1,464.34	
Myrtle Beach Pier and Park, etc...	65,012.53	
Huntington Beach—Special	9,998.98	
Chester State Park—Special.....	23,842.85	
Balances Carried Forward		\$ 148,616.23

TABLE 1—PROTECTION PERSONNEL
Fiscal Year 1964-1965

UNIT	ORGANIZED PERSONNEL					Volunteer Personnel	GRAND TOTAL
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	45	50
Aiken	1	4	2	5	12	180	192
Allendale	1	2	1	3	7	55	62
Anderson	1	2	1	3	7	59	96
Bamberg	1	2	1	2	6	116	122
Barnwell	1	2	2	2	7	174	181
Beaufort	1	3	2	4	10	25	35
Berkeley	1	4	2	4	11	211	222
Calhoun	1	2	1	2	6	108	114
Charleston	1	4	3	3	11	103	114
Cherokee	1	1	1	1	4	79	83
Chester	1	3	1	1	6	64	70
Chesterfield	1	3	1	4	9	35	144
Clarendon	1	3	2	3	9	100	109
Colleton	1	4	3	5	13	115	128
Darlington	1	2	2	3	6	360	366
Dillon	1	2	1	2	6	247	253
Dorchester	1	4	2	3	10	71	81
Edgefield	1	2	1	1	5	65	70
Fairfield	1	4	1	3	9	124	133
Florence	1	4	2	4	11	176	187
Georgetown	1	4	2	4	11	196	207
Greenville	1	3	1	4	9	334	343
Greenwood	1	2	1	2	6	75	81
Hampton	1	3	1	3	8	83	91
Horry	1	5	3	4	13	334	347
Jasper	1	3	2	2	8	118	126
Kershaw	1	3	2	6	12	155	167
Lancaster	1	3	1	2	7	147	154
Laurens	1	3	1	2	7	123	130
Lee	1	2	1	3	7	76	83
Lexington	1	3	2	5	11	214	225
McCormick	1	1	1	1	4	22	26
Marion	1	3	2	3	9	133	142
Marlboro	1	3	2	3	9	138	147
Newberry	1	2	1	2	6	69	75
Oconee	1	2	1	3	7	83	90
Orangeburg	1	5	3	5	14	196	210
Pickens	1	3	1	4	9	133	142
Richland	1	5	2	4	12	264	276
Saluda	1	2	1	1	5	55	60
Spartanburg	1	3	1	4	9	242	251
Sumter	1	3	2	3	9	225	234
Union	1	2	1	1	5	71	76
Williamsburg	1	5	2	4	12	338	350
York	1	2	1	4	8	152	160
TOTALS	46	134	69	138	387	6,618	7,005

TABLE 2—SUMMARY OF FIRES BY MONTHS
July 1, 1964 – June 30, 1965

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Avg. Area Per Fire (Acres)
July	46	1.9	178.9	3.9
August	25	1.0	75.4	3.0
September	31	1.3	58.2	1.9
October	33	1.3	54.7	1.7
November	236	9.7	1,000.4	4.2
December	125	5.1	783.6	6.3
January	612	25.1	5,806.3	9.5
February	376	15.4	2,378.4	6.3
March	311	13.5	3,636.1	11.0
April	320	13.1	2,685.8	8.4
May	249	10.2	1,402.6	5.6
June	58	2.4	766.1	13.2
TOTALS	2,442	100.0	18,826.5	7.7

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR—1964-1965

UNIT	Lightning		Campfire		Smoking		Debris Burning		Incendiary		Machine Use		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	9	48.1	1	4.0	3	9.0	8	14.3	1	27.5	2	13.5	4	9.6	18	73.9
Aiken					19	69.6	15	69.5	3	34.2	2	12.8	26	61.7	75	299.9
Allendale					8	47.0	7	11.5	3	50.0	3	69.0	2	12.0	23	189.5
Anderson	1	12.0	2	11.4	14	36.5	11	33.5	2	1.7	1	1.0	2	1.0	33	97.1
Bamberg	2	7.3			12	22.4	10	55.5	4	14.1			5	4.5	33	103.8
Barnwell	1	7.2	2	15.7	16	99.1	13	79.8	7	18.5			2	1.4	41	221.7
Beaufort					6	25.5	6	42.5	6	266.0			1	2.0	19	336.0
Berkeley			1	1.5	45	215.6	35	196.3	82	1,400.8	1	1.0	1	10.0	165	1,825.2
Calhoun					8	14.2			1	0.8			5	27.7	14	42.7
Charleston	1	0.4			24	77.8	5	17.7	21	125.4	1	1.0	7	24.9	59	247.2
Cherokee					13	52.6	2	3.4	2	7.0	2	13.0	1	2.0	20	78.0
Chester			1	2.1	9	13.6	6	18.9	1	2.4	1	10.0	2	7.9	20	54.9
Chesterfield	3	45.0	1	20.0	1	0.8	7	133.8	10	23.5	2	14.2	14	37.3	38	274.6
Clarendon			2	6.0	13	41.2	30	144.3	52	413.3			2	1.1	99	605.9
Colleton					30	184.9	16	51.5	20	26.5	2	12.0	2	3.5	71	278.5
Darlington	1	0.1	3	17.0	39	122.7	16	196.1	2	68.3	2	5.5	18	54.3	80	463.9
Dillon			1	8.0	22	32.7	25	47.9	5	5.4	1	0.8	11	31.3	65	126.1
Dorchester					35	467.8	12	168.6	9	186.4			3	10.3	59	833.1
Edgefield					7	37.6	4	53.2			1	5.0	2	0.3	14	96.1
Fairfield					9	46.1	2	12.0					9	69.7	20	127.8
Florence					23	165.3	28	166.0	83	733.9	1	1.5	10	34.3	145	1,101.0
Georgetown	1	4.0	1	2.8	14	93.0	9	425.4	20	265.2	1	1.0	4	5.7	50	797.1
Greenville			2	65.1	17	56.0	20	29.4	4	37.7	3	2.0	24	15.5	70	205.7
Greenwood			1	3.0	7	79.6	6	9.2	1	18.2	1	0.8	6	6.4	22	116.6
Hampton			2	6.5	1	0.5	13	41.2	22	94.7			1	11.0	39	153.9
Horry			2	23.0	23	90.6	36	384.0	30	528.5	2	41.0	28	669.4	123	1,745.3
Jasper	2	8.8	2	195.0	8	35.8	9	463.5	20	177.3	3	34.2	2	11.3	46	937.6
Kershaw	2	20.5	7	87.5	12	38.8	11	165.9	2	11.8	4	39.1	13	42.1	51	386.2
Lancaster			3	52.8	14	78.3	10	33.9			1	0.1	4	43.1	32	208.2
Laurens			2	14.7	22	95.0	6	150.5	1	78.0	7	91.3	9	18.3	47	447.8
Lee	1	5.0	3	6.2	9	21.6	9	16.2	4	16.0			6	21.6	32	86.6
Lexington			2	2.5	21	55.4	19	139.2			12	56.9	11	25.6	65	279.6
Marion			1	16.0	10	11.6	7	17.5	5	11.4			3	1.2	26	57.7
Marlboro			3	27.0	11	68.4	23	105.4	9	71.7	5	4.8	10	8.2	61	285.5
McCormick	1	1.4			1	31.2	3	7.8	1	5.0	1	0.1			7	45.5

Newberry	..	..	..	3.1	2	4.3	5	3.8	..	..	1	2.0	1	0.1	10	13.3
Oconee	..	..	..	..	4	13.2	7	11.4	2	1.6	1	2.4	1	46.3	25	74.9
Orangeburg	..	..	..	11.4	61	618.8	29	610.1	45	1,028.2	1	3.0	8	25.2	147	2,296.7
Pickens	..	..	..	..	12	37.7	18	52.8	9	33.0	2	2.8	9	12.4	50	138.7
Richland	..	..	..	6.6	27	48.4	18	63.9	32	603.8	10	15.2	11	31.7	103	769.6
Saluda	5	11.8	4	16.7	1	2.7	10	31.2
Spartanburg	..	..	..	..	17	121.1	9	74.0	5	29.0	3	12.0	11	115.2	45	351.3
Sumter	1	..	..	13.7	24	217.5	22	172.7	24	175.5	..	..	13	58.4	87	639.4
Union	..	..	..	..	10	24.1	2	4.0	..	..	5	24.0	3	3.5	20	55.6
Williamsburg	..	..	..	82.4	7	37.3	30	224.2	51	560.4	5	13.6	7	30.7	109	948.6
York	..	..	..	11.0	20	70.9	11	78.5	10	37.7	7	47.2	5	31.7	54	277.0
TOTALS	28	162.4	67	716.0	715	3,742.3	594	4,817.5	611	7,190.4	97	553.8	330	1,644.1	2,442	18,826.5	

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS
Fiscal Year 1964-1965

UNIT	CLASS A		CLASS B		CLASS C		CLASS D		CLASS E		CLASS F		TOTAL	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Abbeville	..	..	17	46.4	1	27.5	..	..	..	..	..	..	18	73.9
Aiken	7	1.2	63	185.7	5	113.0	..	..	..	..	..	..	75	299.9
Allendale	2	0.3	17	68.2	4	121.0	..	..	..	..	..	..	23	189.5
Anderson	..	..	32	85.1	1	12.0	..	..	..	..	..	..	33	97.1
Bamberg	2	0.3	30	83.5	1	20.0	..	..	..	..	..	..	33	103.8
Barnwell	..	..	36	110.7	5	111.0	..	..	..	..	..	..	41	221.7
Beaufort	..	..	16	71.0	2	65.0	1	200.0	..	..	..	..	19	336.0
Berkeley	9	1.6	121	483.6	31	780.0	4	560.0	..	..	..	..	165	1,825.2
Calhoun	2	0.2	11	28.5	1	14.0	..	..	..	..	..	..	14	42.7
Charleston	3	0.4	51	140.8	5	106.0	..	..	..	..	..	..	59	247.2
Cherokee	1	0.2	19	77.8	..	..	..	..	..	..	..	..	20	78.0
Chester	1	0.2	19	54.7	..	..	..	..	..	..	..	..	20	54.9
Chesterfield	4	0.4	25	58.2	9	216.0	..	..	..	..	..	..	38	274.6
Clarendon	5	0.6	84	310.3	10	295.0	..	..	..	..	..	..	99	605.9
Colleton	11	1.6	57	138.5	3	138.4	..	..	..	..	..	..	71	278.5
Darlington	15	1.9	58	155.0	6	157.0	1	150.0	..	..	..	..	80	463.9
Dillon	19	2.5	45	108.6	1	15.0	..	..	..	..	..	..	65	126.1
Dorchester	..	..	43	150.1	15	530.0	1	153.0	..	..	..	..	59	833.1
Edgefield	4	0.6	6	14.5	4	81.0	..	..	..	..	..	..	14	96.1
Fairfield	..	..	17	52.8	3	75.0	..	..	..	..	..	..	20	127.8
Florence	21	3.0	96	247.0	28	851.0	..	..	..	..	..	..	145	1,101.0
Georgetown	1	0.2	35	113.9	12	375.0	2	308.0	..	..	..	..	50	797.1
Greenville	23	3.3	43	55.4	4	147.0	..	..	..	..	..	..	70	205.7
Greenwood	4	0.6	15	30.4	3	85.6	..	..	..	..	..	..	22	116.6
Hampton	5	0.9	30	71.0	4	82.0	..	..	..	..	..	..	39	153.9
Horry	11	1.4	26	232.9	23	547.0	2	425.0	1	539.0	..	..	123	1,745.3
Jasper	4	0.7	28	94.9	12	254.0	1	176.0	1	412.0	..	..	46	937.6
Kershaw	3	0.6	40	119.6	7	165.0	1	101.0	..	..	..	..	51	386.2
Lancaster	3	0.5	22	60.7	7	147.0	..	..	..	..	..	..	32	208.2
Laurens	3	0.3	35	115.5	9	332.0	..	..	..	..	..	..	47	447.8
Lee	1	0.1	29	59.5	2	27.0	..	..	..	..	..	..	32	86.6
Lexington	7	1.0	52	118.6	6	160.0	..	..	..	..	..	..	65	279.6
Marion	10	1.5	15	40.2	1	16.0	..	..	..	..	..	..	26	57.7
Marlboro	12	1.5	41	103.0	8	181.0	..	..	..	..	..	..	61	285.5

Newberry	1	0.1	..	..	..	1.5	1	3.5	1	2.0	1	0.1	1	3.0	1	3.1	..	..
Oconee	..	..	..	..	..	37.1	8	8.1	3	1.8	6	13.6	6	8.3	2	5.0	..	..
Orangeburg	1	0.2	..	..	..	123.3	10	494.0	22	303.3	28	931.9	4	329.6	20	90.3	1	1.0
Pickens	2	7.5	..	..	..	3.1	7	30.4	13	36.4	9	45.8	9	11.1	3	2.6	..	..
Richland	2	0.8	..	..	..	10.2	6	535.3	20	79.0	11	42.4	8	17.6	13	42.1	3	10.5
Saluda	1	0.7	..	..	..	2.0	1	..	3	7.0	1	10.0	..	..	2	6.8	..	..
Spartanburg	3	36.6	..	..	..	42.0	8	18.0	12	85.2	11	119.5	5	35.0	1	2.0	..	..
Sumter	..	..	..	..	..	16.8	9	278.7	17	154.9	10	84.9	13	63.0	6	7.6	..	..
Union	..	..	..	..	..	..	..	4.5	1	7.0	4	9.0	5	7.7	6	23.9	..	..
Williamsburg	..	..	..	..	..	14.0	5	269.9	14	71.1	15	229.2	14	159.9	9	166.2	1	0.2
York	3	8.2	..	..	..	45.6	13	33.5	7	26.0	6	88.1	6	54.2	4	14.4	1	1.6
TOTALS	46	178.9	25	75.4	31	1,000.4	236	5,806.3	376	2,378.4	331	3,636.1	320	2,685.8	249	1,402.6	58	766.1

TABLE 6—CLASSIFICATION BY CAUSES
FISCAL YEAR 1964-1965

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	28	1.1	162.4	5.8
Campers	67	2.8	716.0	10.7
Smokers	715	29.3	3,742.3	5.2
Debris Burning	594	24.3	4,817.5	8.1
Incendiary	611	25.0	7,190.4	11.8
Machine Use	97	4.0	553.8	5.7
Miscellaneous	330	13.5	1,644.1	5.0
TOTALS	2,442	100.0	18,826.5	7.7

TABLE 7—CAUSES OF FIRES—FIVE-YEAR-PERIOD
(Percent of Total)

CAUSES	1960-61	1961-62	1962-63	1963-64	1964-65	Average For 5-Year Period
Lightning	0.8	2.0	0.9	1.6	1.1	1.2
Campers	3.0	2.8	3.1	3.5	2.8	3.1
Smokers	32.8	31.6	25.6	27.5	29.3	29.1
Debris Burning	29.7	27.3	26.8	24.6	24.3	26.7
Incendiary	23.8	20.6	30.5	21.9	25.0	24.7
Machine Use	2.2	4.0	3.7	5.4	4.0	4.1
Miscellaneous	7.7	11.7	9.8	15.5	13.5	11.1

**TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA
FISCAL YEAR 1964 - 1965**

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville	194,361	18	73.9	.04	4.1
Aiken	477,331	75	299.9	.06	4.0
Allendale	190,786	23	189.5	.10	8.2
Anderson	211,031	33	97.1	.05	3.0
Bamberg	154,407	33	103.8	.07	3.1
Barnwell	161,433	41	221.7	.14	5.4
Beaufort	170,505	19	336.0	.20	17.7
Berkeley	404,049	165	1,825.2	.45	11.1
Calhoun	131,757	14	42.7	.03	3.0
Charleston	264,643	59	247.2	.09	4.2
Cherokee	149,092	20	78.0	.05	3.9
Chester	262,651	20	54.9	.02	2.7
Chesterfield	359,570	38	274.6	.08	7.2
Clarendon	225,189	99	605.9	.27	6.1
Colleton	500,875	71	278.5	.06	3.9
Darlington	177,189	80	463.9	.26	5.8
Dillon	146,786	65	126.1	.09	1.9
Dorchester	232,250	59	833.1	.30	14.1
Edgefield	196,105	14	96.1	.05	6.9
Fairfield	375,414	20	127.8	.03	6.4
Florence	291,549	145	1,101.0	.38	7.6
Georgetown	389,793	50	797.1	.20	15.9
Greenville	286,608	70	205.7	.07	2.9
Greenwood	175,510	22	116.6	.07	5.3
Hampton	283,378	39	153.9	.05	3.9
Horry	492,462	123	1,745.3	.35	14.2
Jasper	277,557	46	937.6	.34	20.4
Kershaw	419,876	51	386.2	.09	7.6
Lancaster	230,775	32	208.2	.09	6.5
Laurens	276,837	47	447.8	.16	9.5
Lee	117,215	32	86.6	.07	2.7
Lexington	302,394	65	279.6	.09	4.3
Marion	228,579	26	57.7	.03	2.2
Marlboro	174,497	61	285.5	.16	4.7
McCormick	143,541	7	45.5	.05	6.5
Newberry	232,222	10	13.3	.01	1.3
Oconee	233,784	25	74.9	.03	3.0
Orangeburg	377,160	147	2,296.7	.61	15.6
Pickens	217,575	50	138.7	.06	2.8
Richland	311,022	103	769.6	.25	7.5
Saluda	182,185	10	31.2	.02	3.1
Spartanburg	242,131	45	351.3	.15	7.8
Sumter	231,546	87	639.4	.28	7.3
Union	206,601	20	55.6	.03	2.8
Williamsburg	410,339	109	948.6	.23	8.7
York	277,440	54	277.0	.10	5.1
Totals	12,050,000	2,442	18,826.5	.16	7.7

**TABLE 9—FIVE-YEAR SUMMARY
FOREST FIRE STATISTICS**

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1960-1961	11,175,000	4,776	59,969.8	0.54	12.6
1961-1962	11,175,000	3,668	35,795.0	0.32	9.8
1962-1963	11,175,000	5,441	68,315.1	0.61	12.5
1963-1964	11,175,000	3,817	34,752.2	0.31	9.1
1964-1965	12,050,000	2,442	18,826.5	0.16	7.7
Five-Year Average	11,350,000	4,029	43,531.7	0.38	10.8

**TABLE 10—STATE SUMMARY LAW ENFORCEMENT INFORMATION
FISCAL YEAR 1964-1965**

	Camden	Florence	Kingstree	Newberry	Orangeburg	Spartanburg	Walterboro	STATE TOTAL
Part A.								
1. No. Willful and Malicious Fires.....	25	43	11	....	15	21	6	121
2. No. Intentional Fires	43	89	176	2	43	18	88	459
3. No. Careless and Negligent Fires.....	165	224	187	117	238	193	172	1,296
4. Total Fires with Fire Law Violations....	233	356	374	119	296	232	266	1,876
5. No. Fires with No Fire Law Violations..	110	144	49	49	102	85	27	566
6. Total No. All Fires.....	343	500	423	168	398	317	293	2,442
Part B.								
1. No. Prosecutions (16-317) .....	....	....	....	....	....	....	....	....
2. No. Prosecutions (16-318)	13	18	5	13	8	15	1	73
3. No. Prosecutions Other Violations .....	....	2	2	....	5	....	3	12
4. Total No. Prosecutions.....	13	20	7	13	13	15	4	85
Part C.								
1. No. Convictions (16-317) .....	....	....	....	....	....	....	....	....
2. No. Convictions (16-318)	13	18	5	13	8	14	....	71
3. No. Convictions Other Violations .....	....	2	2	....	5	....	3	12
4. Total No. Convictions	13	20	7	13	13	14	3	83

TABLE 11—TREE SEEDLINGS DISTRIBUTION BY LAND CLASSIFICATION 1964-65

A. State Nurseries Source

Land Ownership	Percent of Total	No. Trees Planted
Farmer	30.9	15,153,580
Other Individuals	21.5	10,517,649
Associations and Clubs .....	.5	261,470
Lumber Companies	2.2	1,070,139
Pulp and Paper Companies.....	16.2	7,931,200
Other Industry	10.6	5,224,500
Schools .....	.6	284,650
State Forests	10.5	5,134,075
Other State Lands.....	.5	244,630
Cities, Towns, Counties .....	.2	75,000
Federal Government	6.3	3,110,000
TOTAL	100.0	49,009,893

B. Other Source Seedlings Planted in the State

Continental Can Company	2,549,000
Catawba Timber Company	2,184,000
West Virginia Pulp & Paper Company	5,001,000
Union Bag-Camp Paper Corporation	1,731,000
Williams Furniture Company	153,000
Canal Wood Corporation	24,000
R. W. Lloyd	10,000
Clemson University	21,600
TOTAL	11,673,600
GRAND TOTAL SEEDLINGS PLANTED IN THE STATE	60,683,493

C. Direct Seeding

	Acres
Burlington Industries	75
John C. Billingsley	20
Canal Wood Corporation	100
Catawba Timber Company	6
Champion Papers, Inc.	107
Duke Power Company	2
Holly Hill Lumber Company	10
International Paper Company	1,226
Lightsey Brothers	25
J. T. Strahan Company	20
U. S. Atomic Energy Commission	3,032
West Virginia Pulp & Paper Co.	1,148
U. S. Forest Service	552
TOTAL	6,323

TABLE 12—SEEDLING DISTRIBUTION FROM STATE NURSERIES AND OTHER SOURCES BY COUNTIES, SPECIES AND AMOUNT—1964-65

COUNTY	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red Cedar	Yellow Poplar	*Miscellaneous Species	Total	** Direct Seeding Acres
Abbeville	570,250		2,000	3,500	2,500	12,500	1,000	591,750	121
Aiken	197,000	3,350,860	29,000	6,000	39,000		5,500	3,627,360	2,771
Allendale	650	705,500	1,500	500	1,000	11,500		720,650	
Anderson	573,425	14,500	11,150	48,100	24,900	35,700	19,910	727,685	
Bamberg	700	319,750	1,000	750	1,000			323,200	
Barnwell	64,500	1,002,740	29,000		14,350	14,500	6,400	1,131,490	261
Beaufort	101,150	641,000	1,000		3,000		1,100	747,250	
Berkeley	1,216,150	567,000	13,000	500	1,000	500	1,200	1,799,350	637
Calhoun	149,500	176,320	7,000		1,000	3,500	2,500	339,820	
Charleston	56,150	344,500	3,000		3,350	2,000	5,400	414,400	
Cherokee	764,950	2,000	3,000	10,000	4,000	18,737	21	802,708	415
Chester	2,005,350			1,500	6,500	34,500		2,047,850	132
Chesterfield	506,500	3,169,000	2,430,000	2,000	3,000	25,000	2,940	6,138,440	272
Clarendon	287,000	307,360	11,500		7,700	7,500		621,060	
Colleton	1,423,789	473,000	1,000	500	4,500			1,902,789	182
Darlington	82,000	509,360	12,000	3,000	7,000	5,500	10,000	628,60	
Dillon	368,500	512,960	15,000	3,000	5,000	500	750	905,710	
Dorchester	639,850	225,100	1,000	1,500	1,500	1,000	65	869,015	
Edgefield	1,020,850	172,500	1,000	1,500	2,000	39,000		1,236,850	
Fairfield	858,500	2,000	1,500		3,500		500	866,000	79
Florence	216,000	245,360	29,500	1,500	2,500	1,050	67,980	563,890	
Georgetown	2,154,500	30,000						2,184,500	202
Greenville	239,400	2,500	6,750	63,600	16,350	10,500	11,670	350,770	
Greenwood	565,850	332,500	2,500	4,500	9,500	6,000	6,000	926,850	
Hampton	142,650	1,401,000	10,500	1,000	1,000	5,000	1,000	1,562,150	
Horry	414,000	1,148,500	1,000	1,000	1,500			1,566,000	
Jasper	232,650	1,482,000	25,000	500		3,000		1,743,150	225
Kershaw	2,014,600	3,084,740	21,000	500	11,500	9,500	10,200	5,152,040	107
Lancaster	1,775,250	158,500	1,500	2,500	4,000	500		1,942,250	6
Laurens	1,444,250	500	1,500	7,000	6,500	12,000	1,000	1,472,750	328
Lee	250,000	712,360	1,000	1,000	20,500	500		985,360	
Lexington	103,000	2,181,520	104,000	5,000	43,500	10,000	4,500	2,451,520	

Marion	41,650	353,860	11,500	3,000	4,100	100	74,000	488,210	.....
Marlboro	192,000	337,980	3,000	3,000	11,000	24,000	10,700	581,680	.....
McCormick	534,800	17,000	.....	.....	1,500	.....	.....	553,300	270
Newberry	1,201,800	4,000	.....	.....	4,000	.....	500	1,217,800	10
Oconee	789,725	9,000	.....	2,000	6,735	5,500	16,975	978,385	1
Orangeburg	161,200	686,200	23,300	3,000	12,000	25,650	7,950	916,650	141
Pickens	298,800	1,350	2,075	63,886	5,799	20,500	15,036	407,446	1
Richland	163,000	890,985	28,525	5,915	11,350	4,500	6,900	1,111,175	.....
Saluda	219,800	21,000	500	.....	.....	.....	.....	241,300	30
Spartanburg	1,244,560	52,000	8,550	50,125	14,500	6,000	2,150	1,377,885	.....
Sumter	194,000	676,860	233,500	1,500	7,500	2,000	21,700	1,137,060	.....
Union .....	.....	1,224,450	.....	2,000	1,200	1,000	500	1,229,150	46
Williamsburg	876,500	250,810	9,000	150	6,500	5,250	500	1,148,710	86
York	1,086,400	12,500	2,500	3,000	.....	28,000	500	1,132,900	.....
Out-of-State	536,600	7,000	3,500	220,500	27,000	20,275	3,500	818,375	.....
TOTAL	27,979,749	27,819,925	3,105,600	657,076	364,834	435,762	320,547	60,683,493	6,323

* Miscellaneous Species

Bald Cypress	153,000
Virginia Pine	12,460
Black Walnut	10,590
Scotch Pine	70,575
Austrian Pine	7,915
Japanese Black Pine	4,786
Shortleaf Pine	9,950
Arizona Cypress	5,400
Cottonwood	18,335
Oak	3,700
Chestnut	2,526
Table Mountain Pine	1,500
Red Bud	25
Sand Pine	10,000
Sweet Gum	9,700
Dogwood	65
Butternut	10
Ginkgo	10

** Direct Seeding

Loblolly	2,522
Longleaf	3,528
Slash	241
Yellow-Poplar	20
Black Walnut	10
White Pine	2

TABLE 13—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

COUNTY	Seedlings Planted 1929-64	Seedlings Planted 1964-65	Grand Total Planted to Date	Acres Planted Through June 30, 1965	Acres Needing Planting as of June 30, 1965
Abbeville	20,563,312	591,750	21,155,562	21,156	131,587
Aiken	127,925,219	3,627,360	131,552,579	131,553	240,114
Allendale	41,929,945	720,650	42,650,595	42,651	40,420
Anderson	28,698,064	727,685	29,425,749	29,426	191,746
Bamberg	26,605,900	323,200	26,929,100	26,929	37,661
Barnwell	72,606,080	1,131,490	73,737,570	73,738	62,805
Beaufort	8,070,595	747,250	8,817,845	8,818	53,251
Berkeley	30,114,435	1,799,350	32,413,785	32,414	103,780
Calhoun	14,165,025	339,820	14,504,845	14,505	46,969
Charleston	6,893,990	414,400	7,308,390	7,308	66,848
Cherokee	13,487,021	802,708	14,289,729	14,290	122,807
Chester	25,266,385	2,047,850	27,314,235	27,314	144,425
Chesterfield	68,023,725	6,138,440	74,162,165	74,162	156,504
Clarendon	20,920,215	621,060	21,541,275	21,541	25,063
Colleton	40,312,505	1,902,789	42,215,294	42,215	107,394
Darlington	13,577,220	628,860	14,206,080	14,206	68,219
Dillon	7,380,255	905,710	8,286,165	8,286	30,827
Dorchester	25,165,480	869,015	26,034,495	26,034	79,506
Edgefield	16,963,238	1,236,850	18,200,088	18,200	52,404
Fairfield	21,949,219	866,000	22,815,219	22,815	128,885
Florence	6,929,118	563,890	7,493,008	7,493	52,102
Georgetown	20,638,600	2,184,500	22,823,100	22,823	87,126
Greenville	16,848,899	350,770	17,199,669	17,200	203,477
Greenwood	19,509,607	926,850	20,436,457	20,436	56,329
Hampton	34,586,865	1,562,150	36,149,015	36,149	79,359
Horry	21,066,645	1,566,000	22,632,645	22,633	138,542
Jasper	32,689,130	1,743,150	34,432,280	34,432	56,850
Kershaw	90,495,487	5,152,040	95,647,527	95,648	139,583
Lancaster	25,140,353	1,942,250	27,083,203	27,083	114,225
Laurens	36,804,559	1,472,750	38,277,309	38,277	139,542
Lee	11,808,555	985,360	12,793,915	12,794	58,648
Lexington	32,339,840	2,451,520	34,791,360	34,791	150,319
McCormick	9,540,675	553,300	10,093,975	10,094	78,851
Marion	8,219,045	488,210	8,707,255	8,707	14,056
Marlboro	21,099,230	581,680	21,680,910	21,681	12,075
Newberry	22,981,473	1,217,800	24,199,273	24,199	87,910
Oconee	16,047,653	978,385	17,026,038	17,026	237,850
Orangeburg	47,781,715	916,650	48,698,365	48,698	51,577
Pickens	14,692,189	407,446	15,099,635	15,100	183,946
Richland	33,150,100	1,111,175	34,261,275	34,261	124,185
Saluda	8,291,671	241,300	8,532,971	8,533	46,493
Spartanburg	31,153,014	1,377,885	33,130,899	33,131	198,519
Sumter	39,104,692	1,137,060	40,241,752	40,242	51,920
Union	22,454,974	1,229,150	23,684,124	23,684	130,318
Williamsburg	14,121,415	1,148,710	15,270,125	15,270	64,161
York	29,328,446	1,132,900	30,461,346	30,461	193,546
Out-of-State	2,031,773	818,375	2,850,148	2,850	.....
TOTAL	1,300,574,851	60,683,493	1,361,258,344	1,361,257	4,643,224

STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1965 to JUNE 30, 1966



JOHN R. TILLER, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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To Honorable Robert E. McNair, Governor, and to the General Assembly of South Carolina:

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual report upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1965 to June 30, 1966.

Respectfully submitted,

STATE COMMISSION OF FORESTRY
Fulton B. Creech, *Chairman*.

S. C. STATE COMMISSION OF FORESTRY

Members of the Commission

Fulton B. Creech, Chairman, Sumter

A. Brandon Taylor, Jr., Vice-Chairman, Spartanburg

C. H. Niederhof, Charleston

Robert R. Rigby, Jr., Columbia

Dr. R. C. Edwards, President, Clemson University, Clemson

Administration

John R. Tiller, State Forester and Secretary to the Commission

John M. Shirer, Assistant State Forester, Fire Control

Edward C. Pickens, Assistant State Forester, Management

Walter T. Ahearn, Assistant State Forester, Information and
Education

Howard R. Scott, Assistant State Forester, Administration

E. R. Vreeland, State Park Director

Administration

SUMMARY

State-appropriated funds were provided for salary adjustments; however, losses of both technical and other personnel continued at an excessive rate. A total of 69 employees resigned during the year, or a total of 11%.

The Commission budgeted and expended on all phases of the Forestry and State Park program \$3,512,900.62. Of this total, the Division of Forestry expended \$3,042,401.31 and the Division of State Parks \$470,499.31. (See Appendix for detailed explanation of funds available and expenditures made.) State-appropriated funds amounted to \$2,088,940.00 for the Division of Forestry and \$436,643.87 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 70 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel driving Commission-owned motor vehicles or personal vehicles on Commission business were involved in 13 accidents. Of the 13 accidents which occurred, 4 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business through specific training and assistance of the National Safety Council.

PERSONNEL

A large number of Commission employees continue to resign to accept better paying positions. Such resignations handicapped the efficient operation of all Commission activities. Eleven per cent of the total personnel resigned during the year, county unit

personnel being the highest per cent. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

Forest Fire Protection

INTRODUCTION

Intensive forest fire protection assistance is provided to all private timberland owners in the state by the Fire Control Branch of the South Carolina State Commission of Forestry. This fire protection assistance, furnished through county organizations, is based on the theory that the private landowner is responsible for prevention and control of fire on his property and receives cooperation from the Commission of Forestry wherever and whenever possible.

Many landowners have equipped themselves with hand tools and mechanized units and have sufficient personnel to adequately handle wild fires on their woodlands.

Total state and private forest area in South Carolina comprises some 12,050,000 acres. In addition to the above total, the U. S. Forest Service protects 587,221 acres within the national forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

County Organizations:

Each county fire protection organization consist of a ranger, wardens, lookout towermen, and tractor operators. The number of personnel in each county varies according to size and forest acreage. Total county personnel in South Carolina consists of 46 rangers, 134 wardens, 70 tractor operators, and 138 lookout towermen.

County Forestry Boards:

The State Forest Fire Protection Act of 1945 provides for a county forestry board consisting of five members to be appointed by the State Forester upon the recommendation of the majority of the County Legislative Delegation. The individuals who serve on the forestry boards are appointed for a five-year term. An annual board meeting is held each year to discuss and review forest fire protection activities within the county.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards is composed of one delegate from each county board elected by the

board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities. The committee meets annually to discuss the proposed forestry program for the coming fiscal year and to consider the budget request which is submitted to the State Legislature.

Cooperative Agreements with U. S. Forest Service:

The Commission of Forestry and the U. S. Forest Service maintain a formal agreement to assist one another with the detection and suppression of fires which occur along the immediate vicinity of the national forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

Instructing and training of personnel is one of the most important phases of fire control work. Training is constantly required to accomplish the many and varied activities of the Fire Control organization efficiently and economically. Special emphasis is placed on local and on-the-job training in order to tailor the instruction to fit the individual and his job responsibility. Group training is carried on periodically and includes such subjects as law enforcement, weather and fire behavior, large fire organization, fire fighting tactics, and civil defense.

Most of the training during the past year continued to be individual and on-the-job instruction.

Fire Control Inspections:

Complete fire control inspections are carried out each year in the counties of the state in an effort to improve the efficiency of the fire control program. All phases of fire control activities are covered in these inspections which are conducted by central and district office personnel.

Inspection of the fire control fleet of mechanized equipment is a constant activity. Emphasis is placed on preventive maintenance in order to keep all fire control equipment in a complete state of readiness.

Inspections are made on equipment by traveling mechanics, district mechanics, and by the equipment operators.

Fire Control Progress Checks:

Periodically in each district of the state, fire control progress checks are held. The purpose of these checks is to inspect each phase of the entire fire control program to determine what can be done to improve the overall activities of the organization. These checks are carried out by the central office Fire Control staff in an endeavor to maintain a high degree of efficiency in the fire control program in all districts of the state.

Law Enforcement:

Sixty-three employees of the State Commission of Forestry are commissioned and empowered to enforce the forest fire laws of the state. These law enforcement officers have been given specialized training in investigation and prosecution of forest fire law violations.

Assistance and cooperation continued to be excellent from the S. C. Law Enforcement Division and local police organizations in investigating and prosecuting forest fire cases during the past year.

Two hundred and thirty-one cases were prosecuted and two hundred and thirty convictions were obtained for various forest fire law violations. A breakdown of cases prosecuted is as follows: sixteen prosecutions and sixteen convictions for violation of the burning permit and/or notification laws; two hundred six prosecutions and two hundred five convictions for violation of the careless and negligent law; and nine prosecutions and nine convictions for violation of the willful and malicious law.

Burning Permit and Burning Notification Laws:

Counties with the permit law statutes are Chesterfield, Aiken, Orangeburg, Georgetown, Charleston, Greenville, Clarendon, Marlboro, Williamsburg, and Horry. Counties with notification laws include Beaufort, Colleton, Hampton, Jasper, Lee, Abbeville, Allendale, Greenwood, Lancaster, McCormick, and Newberry. Union County passed a notification law during the past year. This makes a total of 22 counties with either a permit law or notification law.

Fire Plans:

Each county unit organization is provided with a fire control plan which guides and controls fire suppression activities within

the unit. The plans are kept current and revised to conform with changing conditions and latest operating procedures.

Plans similar to the fire control plans used in county units are prepared for landowners throughout the state who desire to maintain adequate fire protection on their timberland ownerships.

Forestry Study Committee:

Members of this eleven-man committee are: C. H. Niederhof, J. D. Carroll, John D. Long, Harry M. Arthur, Frank E. Baldwin, Jr., George W. McKown, Earle R. Ellerbe, Charles G. Garrett, W. Clyde Graham, Clyde D. Jenkins, Jr., and Hubert W. Smoak.

The Committee conducts a series of meetings and hearings each year and formulates many recommendations on the different phases of forestry, which are consolidated in an annual report to the General Assembly. The General Assembly continued the Forestry Study Committee for the fiscal year 1966-67.

Southern States Forest Fire Control Conference:

The twenty-seventh Southern States Forest Fire Control Conference was held at Gatlinburg, Tennessee, on May 24, 25, and 26, 1966. These annual meetings are designed to allow exchange of fire control ideas between states and to promote efficiency in fire protection activities.

Sam Beichler Award:

South Carolina was awarded the U. S. Forest Service trophy for greatest achievements among the southern states in forest fire protection in 1965.

South Carolina showed the most progress in fire protection in the eleven state Southern Region, competing against its own forest fire record and those of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, Tennessee and Texas.

The award is a Smokey Bear statuette which honors and recognizes Sam Beichler, the late Forest Service official who devoted more than 20 years to improving forest fire protection in the South.



Forestry Commission Chairman Fulton B. Creech (left) and State Forester John R. Tiller (right) explain to Governor Robert McNair the significance of the Sam Beichler Award for forest fire prevention progress.

South Carolina's steady and substantial progress in forest fire protection work is documented by the fact that when the award program was launched in 1961, South Carolina ranked seventh among the eleven states. In 1962 it moved to third place, and in 1963 and 1964 rose to second place, finally achieving the number one ranking in 1965.

Southeastern States Forest Fire Compact Commission:

The ten southeastern states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia make up the Southeastern States Forest Fire Compact Commission.

The membership of this Commission from each state is comprised of a Compact Administrator (the State Forester) and a four-member advisory committee. The South Carolina member-

ship includes Senator L. Marion Gressette of Calhoun County, Representative Charles G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County, and R. R. Rigby of Columbia.

The annual meeting of the Southeastern States Forest Fire Compact Commission was held February 3, 1966 at Atlanta, Georgia. One of the actions of this meeting was to select South Carolina as the host state for the 1966 Compact training meeting.

The annual Compact training meeting for forest fire control personnel and fire-weather forecasters was held August 17-19, 1965 at Jackson, Miss.

Civil Defense:

The S. C. Forestry Commission cooperates with the State Civil Defense agency in emergencies and disasters which occur or may occur in the state. Assistance with communications and monitoring of radiological fallout is rendered by Commission personnel.

Lookout Towers:

There are 138 forest fire lookout towers in South Carolina which are operated by the S. C. State Forestry Commission. The U. S. Forest Service operates 17 lookout towers on the Sumter and Francis Marion National Forests in addition to the state-operated towers. State and federal towermen cooperate with each other in spotting and locating fires which occur within their range of visibility.

Tower Unit Buildings:

During the 1965-66 fiscal year, no major improvements were installed at the towersites. Routine maintenance jobs were carried out at all towers during the year.

ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

138 Lookout Tower Units	\$ 2,947,503
46 Fire Danger Measurement Stations	3,450
100 Miles Telephone Line	30,000
Central Radio Shop and Map Laboratory	25,000
Central Repair Shop and Warehouse System	286,480
7 District Repair Shops	35,000
Total	\$ 3,327,433

Radio:

A continuing program of updating the radio equipment has included the installation of a number of transistorized mobile units on tractors and in ranger vehicles.

Another system improvement has been started by burying control cables from the towers to residences instead of running these lines overhead. This reduces lightning hazard, and improves the appearance at the site.

In August 1965 a district radio shop was established at Newberry, thus affording the Commission a district radio technician for each of the seven districts.

The late March fire blowup emphasized the value of portable radio units for aerial detection.

System maintenance and repairs were performed throughout the year.

**ESTIMATED CAPITAL VALUE OF RADIO IMPROVEMENTS
AND EQUIPMENT**

7 Remote Control Base Units 250 watt.....@	\$3,000	\$ 21,000
1 Remote Control Base Unit 100 watt.....		2,000
8 Remote Control Base Units 60 watt.....@	1,400	11,200
6 Mobile Relay Base Units	@ 1,600	9,600
192 Local Control Base Units	@ 550	105,600
279 Mobile Units (Tube Type)	@ 550	153,450
10 Mobile Units (Transistorized) 80 watt (For Mobile Relay)	@ 810	8,100
61 Mobile Units (Transistorized) 80 watt....@	650	39,650
69 Mobile Units (Transistorized) 15 watt....@	450	31,050
14 Portable Units (1½, 3, 5, & 8 watts).....@	700	9,800
134 Auxiliary Receivers	@ 155	20,770
9 Radio Towers		35,000
TOTAL		\$ 436,020

Equipment:

Six additional medium suppression units, complete with truck and tractor, were added to the fire suppression fleet during the year. These six units were assigned to fire wardens in Georgetown, Williamsburg, Aiken, Oconee, York and Colleton Counties. Ten new tractors were purchased as replacements for old

worn out units during 1965-66. Eleven old medium suppression unit transports were replaced with new trucks last fiscal year, and twenty-one new pickup trucks were purchased as replacements for worn out trucks being used by county rangers and district mechanics. Three heavy truck-tractors were traded for new equipment during the year.

Three mechanic and radio technician trucks were replaced.

INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1966

1510 Back Pack Pumps	\$ 52,850
5014 Fire Rakes	17,220
1950 Fire Swatters	8,675
300 Backfire Torches	7,650
12 Heavy Suppression Tractor-Plow Units w/Transports	272,000
3 Heavy Dozers	80,000
93 Light Tractor-Plow Units w/Transports.....	744,000
2 Heavy Emergency Fire Suppression Units	64,000
3 Heavy Lowboy Truck-Transports	10,000
45 Ranger Pickup Trucks	78,750
1 1/4-Ton Jeep	2,250
7 Sedan Delivery Trucks	14,000
2 Two-Ton Stakebody Trucks	7,650
16 1/2-Ton Pickup Trucks	28,000
1 Mobile Field Headquarters Unit	3,200
1 Field Kitchen w/Power Supply Trailer & Water Truck	14,000
1 Supply Van	2,500
TOTAL	\$ 1,407,745

Equipment Maintenance Shop:

Since March of 1964, the S. C. State Commission of Forestry has had its Central Fire Control equipment maintenance shops and warehouses at 5500 Broad River Road, Columbia, S. C. Heavy and specialized repairs are made to all fire control equipment at this Central Shop location. All new fire control equipment is processed at the Central Shop.

Two traveling mechanics, headquartering at the Central Repair Shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the district mechanics and equipment operators, make such necessary repairs as they are equipped to handle. During the past year, the traveling mechanics made 692 complete field inspections of equipment and conducted 1,312 field repair jobs. Installations of fire-fighting equipment were made on 32 new trucks.

Central Shop personnel made many repairs to automotive equipment owned by the Commission and made many items necessary for field use. Some of the work handled by the mechanical force is listed below.

Major repairs were made to 16 tractors, 44 light trucks, 58 heavy trucks, 10 light plows, 1 heavy plow, and 3 heavy trailers.

In addition to repair work, many items are adapted to field use or manufactured outright at the Central Shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. The facilities are used for warehousing certain materials and supplies necessary for operation of the forestry districts and are headquarters for mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district.

Columbia Radio Shop:

Central Radio Communications Maintenance and Repair Shop is located at 241 Catawba Avenue in Columbia. All activities, including installations, maintenance, and repair of communications equipment by the radio technicians assigned to the outlying district repair shops, are administered from this central headquarters.

Fire Control Maps:

Since 1958 a map laboratory, complete with drafting room and map making facilities, has been operated by the Commission of Forestry. All maps required in forest fire protection activities in the state are manufactured at this laboratory facility.

Use of Aircraft in Fire Control:

Arrangements have been made locally in each forestry district to supplement lookout towers with aerial detection when necessary. Radio equipped airplanes are used on a contract basis. These rental aircraft are used to detect and check fires during periods of high occurrence, to direct suppression forces, and to assist law enforcement efforts in problem areas.

The heaviest need for aircraft ever experienced by the Forestry Commission occurred during the past year. Aircraft rental totaled approximately 1000 hours during the year. March 20, 1966, marked the first time in the history of the Forestry Commission that all seven forestry districts used air patrol at one time.

Firebreak Plowing Service:

The General Assembly during their 1964 Session included in the General Appropriation Bill a provision permitting the Commission of Forestry to plow requested firebreaks for private owners, and charge for the same at the rate of \$10.00 per hour for heavy suppression equipment and \$8.00 per hour for medium suppression equipment.

Listed below is a summary of firebreak service by district for the 1965-66 fiscal year.

Firebreak Service By District

<i>District</i>	<i>Hours Med. Units</i>	<i>Hours Heavy Units</i>	<i>Approximate Number Properties</i>	<i>Miles Plowed</i>
Camden -----	36	49	28	133
Florence -----	53	11	34	96
Kingstree -----	118	20	43	183
Newberry -----	15	---	8	17
Orangeburg -----	21	32	20	64
Spartanburg -----	20	9	7	20
Walterboro -----	180	13	74	204
 Total -----	 443	 134	 214	 717

Fire-Weather Forecasting:

Fire-weather forecasts were provided by a fire weather forecaster assigned to South Carolina in June of 1965. Regular and special forecasts are prepared by fire-weather specialists stationed at the U. S. Weather Bureau in West Columbia. This information is furnished regularly during fire season to the Forestry Commission, the U. S. Forest Service, and is available through this Weather Bureau office to interested agencies and persons throughout the state.

Fire Danger Measurement:

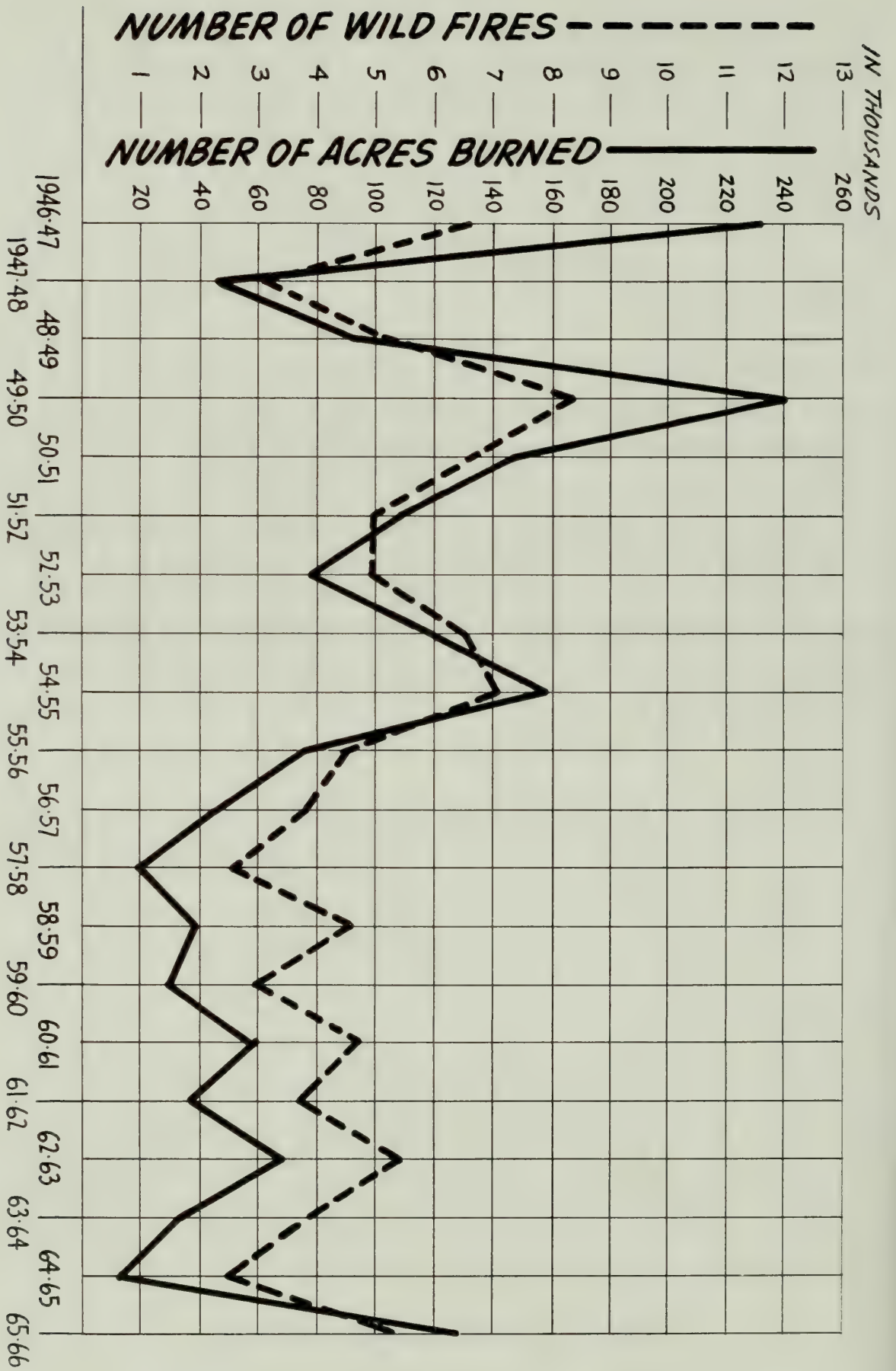
Fire danger measurement stations are maintained in each county of the state. Stations are read twice daily and the weather information disseminated to all fire control personnel for their guidance in work planning and fire suppression readiness. Forest fire danger is rated by Class day ranging from 1 to 5, Class 1 being the least danger and 5 the greatest. During the past year, average danger station records indicated the following: 199 Class 1 days, 89 Class 2 days, 46 Class 3 days, 23 Class 4 days, and 8 Class 5 days.

Legal Fires:

Legal fires are all forest fires which are previously authorized by the landowner, and started by him or his authorized agent, and which burn entirely upon his land. Legal fire records show that individual landowners conducted 1,920 fires which burned 219,890 acres for various purposes during 1965-66. Fires used in hazard reduction totaled 788 and burned 96,241 acres. A total of 301 fires burning 87,776 acres were handled on hunting preserves for the purpose of improving woodland hunting conditions and game management. Burning conducted to reduce debris and rubbish in woodlands accounted for 521 fires and 12,346 acres burned. Burning of timberland for grazing purposes showed a total of 199 fires burning 12,304 acres, and 111 fires burning 11,223 acres were carried out for miscellaneous purposes such as destruction of insects, varmints, etc.

FOREST FIRE SUMMARY—1965-66

During the fiscal year 1965-66 South Carolina experienced 5,467 wildfires which burned 127,804.9 acres of state and privately owned timberlands, which represents 1.06 percent of the



12,050,000 acres under protection. The state recorded 48 fires, each of which exceeded 300 acres in size. Fourteen of these fires were larger than 1,000 acres each and 4 fires burned more than 5,000 acres each. Counties which suffered unusually heavy fire losses were Berkeley, where 301 fires burned 15,365 acres; Lexington had 106 fires which burned 8,919 acres; Aiken had 121 fires burning 7,475 acres; Marlboro experienced 137 fires which burned 7,413 acres; Orangeburg recorded 314 fires burning 5,348 acres; and Florence had 438 fires which burned 4,409 acres. Counties experiencing light losses were McCormick, where 25 fires burned 198 acres; Newberry, 33 fires which burned 101 acres; Saluda, 34 fires burning 129 acres; and Abbeville where 39 fires burned 216 acres. The unusually disastrous fire season experienced this year was the worst since 1954-55, and is quite a contrast to the previous year when the state established the best fire record in the history of organized protection.

Recorded precipitation in South Carolina during fiscal year 1965-66 was over 20 inches less than the previous year. The month of December was extremely dry with a deficiency of 2.48 inches of below normal rainfall. An absolute minimum precipitation was recorded from the first part of March until the middle of April. The average amount of rainfall experienced over the state and the departure from normal by months is shown below:

<i>Month</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
July, 1965	7.11	+ 1.35
August, 1965	4.59	— .71
September, 1965	2.82	— .57
October, 1965	2.90	+ .18
November, 1965	2.51	— .03
December, 1965	1.01	— 2.48
January, 1966	5.94	+ 2.64
February, 1966	5.16	+ 1.54
March, 1966	3.32	— .95
April, 1966	2.99	— .61
May, 1966	6.02	+ 2.64
June, 1966	3.97	— .12
TOTAL	48.34	+ 2.88

A five-year summary of precipitation by fiscal years is shown below :

<i>Year</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
1961-62 -----	51.27	+ 2.44
1962-63 -----	50.03	+ 3.47
1963-64 -----	53.93	+ 8.47
1964-65 -----	70.00	+24.54
1965-66 -----	48.34	+ 2.88
Average -----	54.71	+ 8.36

South Carolina Weather Story for the Month of March 1966 as published by the Columbia Weather Bureau.

March . . . Windy . . . Cool . . . Dry . . . Over South Carolina March 1966 will be long remembered due to the high forest fire incidence. The chief factor was the generally subnormal rainfall that varied from one to two inches below usual values at most locations. Most of the substantial rain fell in the first four days with token amounts after that date. Afternoon humidities during the month of March were the lowest in 35 years at Columbia (afternoon humidity data were not recorded in convenient form before 1931). Therefore it is possible that this last March had the lowest humidities on record. This extended dry period plus the usual windy March weather created the worst forest fire hazard in many years by the close of the month. Due to this situation all rural areas were closed to burning by the Governor on the 31st for the first time in South Carolina history.

March Rainfall 1966:

<i>Station</i>	<i>Rainfall</i>	<i>Departure</i>
Aiken -----	3.30	—1.03 (Driest March in 9 years)
Anderson -----	3.92	—1.23 (Driest March in 11 years)
Augusta -----	3.73	—0.44 (Driest March in 11 years)
Camden -----	3.65	—0.81 (Driest March in 10 years)
Caesars Head -----	3.64	—3.58 (Driest March in 9 years)
Cheraw -----	3.34	—0.80 (Driest March in 11 years)
Chester -----	2.74	— (Driest March in 12 years)
Charleston Airport -----	2.65	—1.28 (Driest March in 3 years)
Clemson -----	3.70	—1.84 (Driest March in 12 years)
Columbia Airport -----	2.23	—2.03 (Driest March in 11 years)
Florence -----	2.72	—0.92 (Driest March in 3 years)
Greenwood -----	4.09	—0.90 (Driest March in 11 years)
Newberry -----	3.39	—1.08 (Driest March in 11 years)
Winnsboro -----	2.72	—1.63 (Driest March in 11 years)

STATE OF SOUTH CAROLINA

Executive Office

Columbia

PROCLAMATION

WHEREAS, the State has experienced twenty-five (25) successive days without any appreciable precipitation, and

WHEREAS, we have experienced abnormally high fire increases which have inflicted tremendous losses to our forests and other resources, and

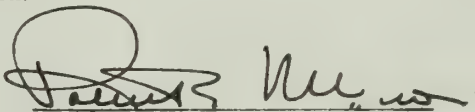
WHEREAS, experts in the field of forest fire weather forecasting predict that this condition will worsen and continue for probably another week, and

WHEREAS, by reason of the drought, low humidity, high winds, and other conditions, the forests and woodlands in the State are in serious danger of fires, and

WHEREAS, forest fires constitute a hazard to public safety and welfare;

NOW, THEREFORE, by virtue of authority vested in me under the provisions of Section 29-41 of the Code of Laws of South Carolina, 1962, it is hereby proclaimed that the use of any fire on or adjacent to any forests, woodlands, brushlands, or grasslands of the State shall be prohibited beyond the limits of any incorporated municipality.

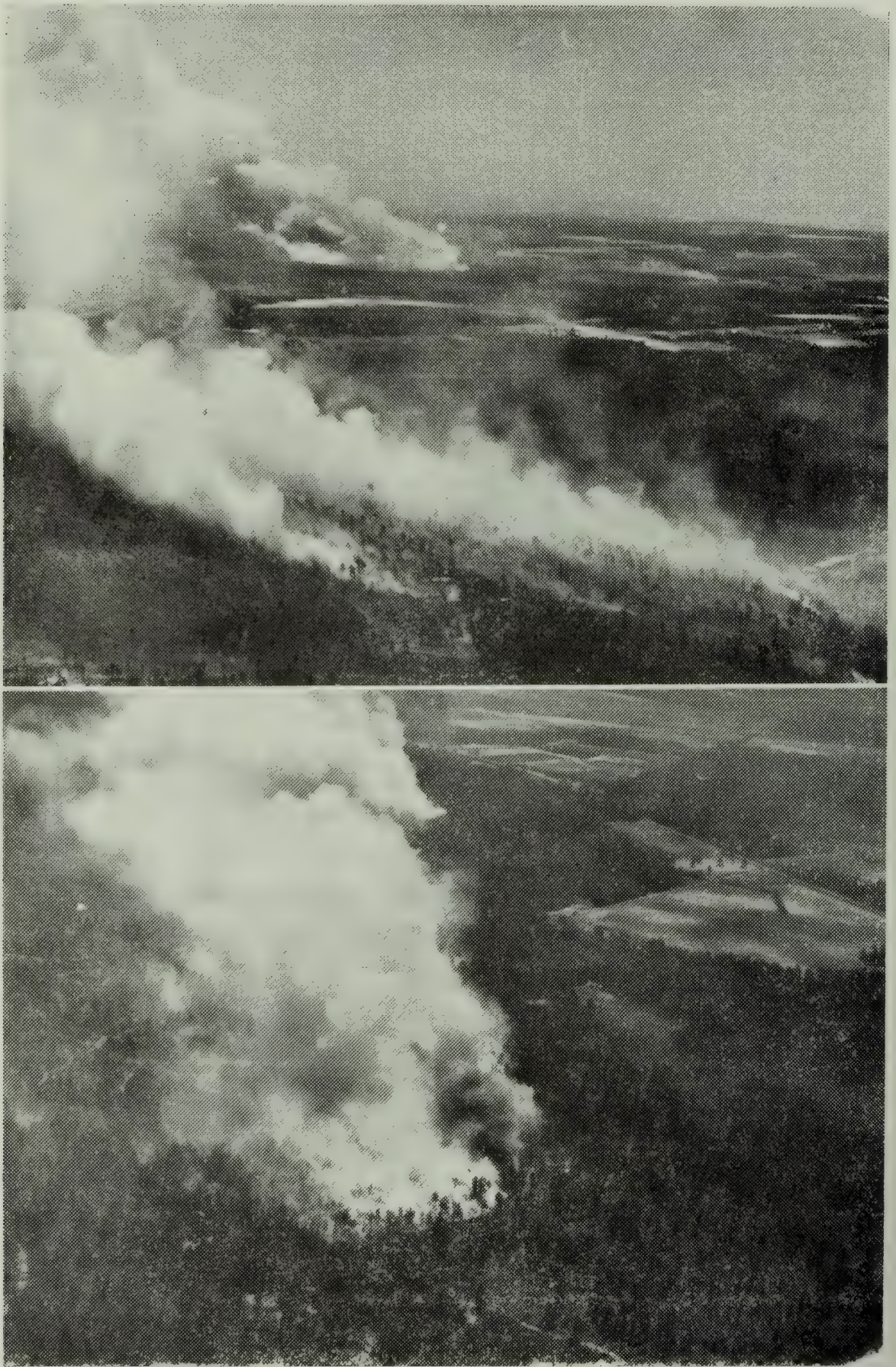
The provisions of this proclamation shall remain in full force and effect until nullification.



Robert E. McNair
Governor of South Carolina

March 31, 1966

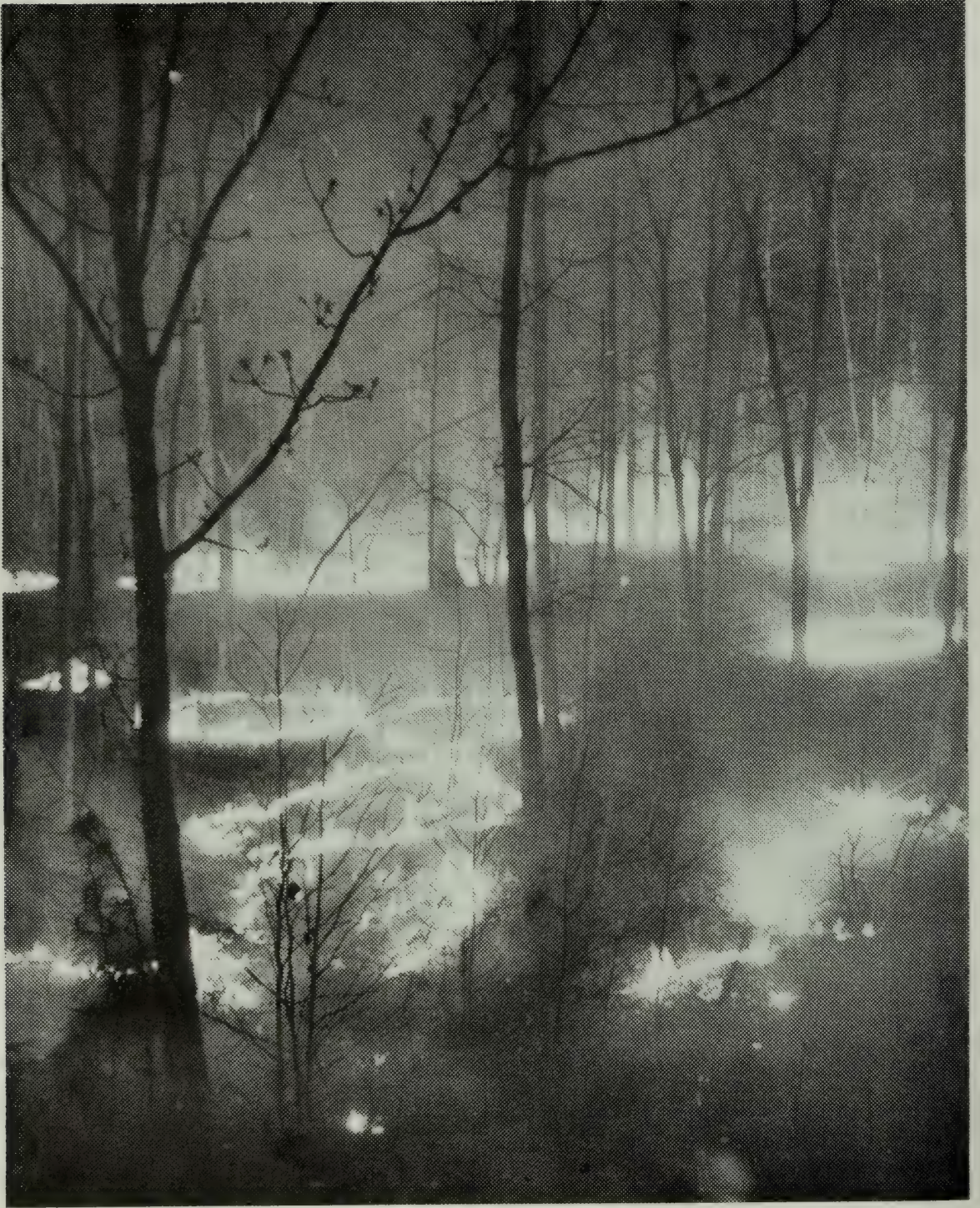




Forest fires everywhere and on broad fronts was the story in South Carolina during the month of March 1966. (Photos courtesy of STATE-RECORD)



Low humidity and persistent winds fanned forest fires quickly into infernoes that rendered hand tools ineffective and direct suppression impossible. (Photos courtesy of STATE-RECORD)



Erratic fire behavior prevailed where the tiniest spark "exploded" into uncontrollable flames. Wind gusts spread sparks and fire yards ahead of the main blaze making the fire fighting job an extremely hazardous one. (Photo courtesy of STATE-RECORD)



Hundreds of rural homes were threatened as forest fires roared through South Carolina woodlands. Many were destroyed as sparks and burning leaves carried by winds showered their roof tops.



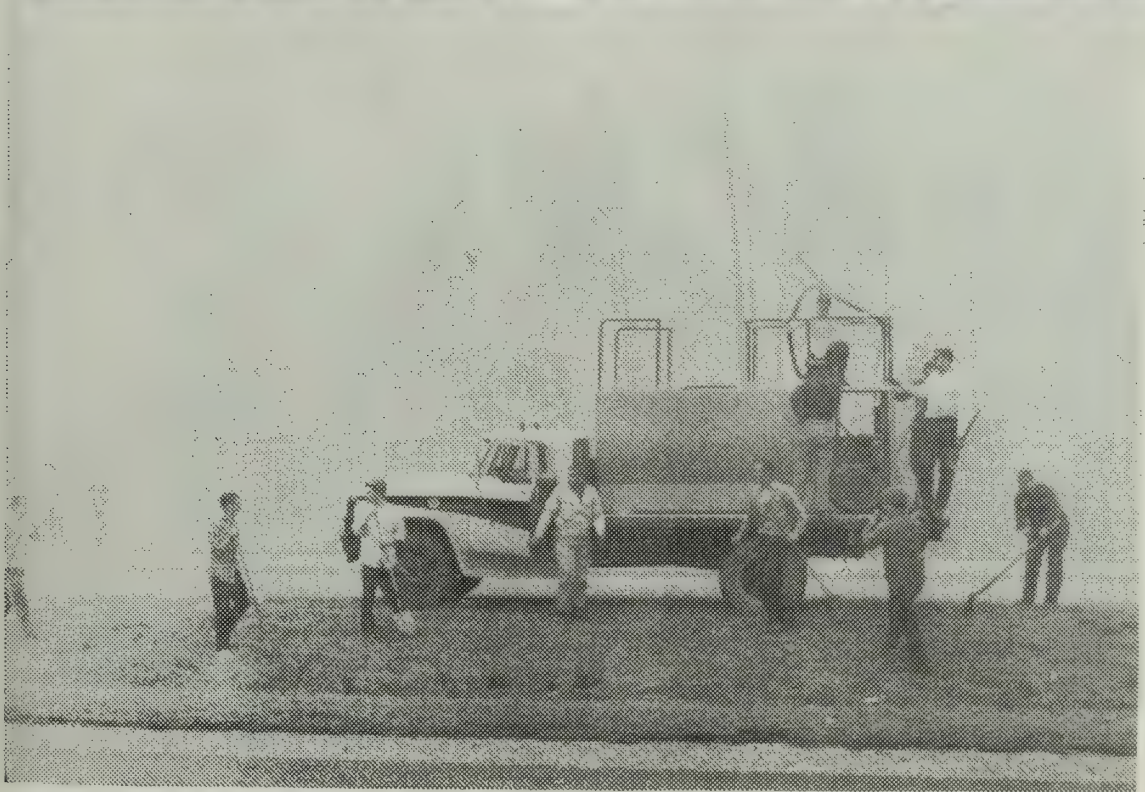
Highways and roads were choked with smoke, fire fighters, and moving equipment. Hazardous driving conditions prevailed as the highway patrol, sheriffs departments and concerned citizens tried to direct traffic safely through. (Photos courtesy of STATE-RECORD)



Mobilized National Guardsmen and thousands of private citizens joined regular fire fighters to battle the many wildfires that plagued South Carolina woodlands. Once controlled, it took manpower and continual patrol to keep smoldering stumps and litter from bursting into flame again. (Photos courtesy of STATE-RECORD)



The shovel from the tool shed was among the many improvised fire fighting tools used as citizens in every section of the state worked to keep forest fires from their barns and buildings. (Photo courtesy of STATE-RECORD)



A tanker, backed up by men and hand tools, helped keep the head of the "Gaston fire" from jumping Highway I-26. (Photos courtesy of STATE-RECORD)



Aircraft proved invaluable by keeping ground forces informed as to overall fire conditions and saved many a fire fighter from being trapped by shifting fire lines and unauthorized backfires.



Farm tractors, commercial earth moving equipment and regular forest fire fighting tractors and plows joined to attempt control of raging fires. (Photos courtesy of STATE-RECORD)



In the sixteen day period between March 18 and April 3, 1,750 wildfire burned 90,000 acres of South Carolina woodlands. Crownfire, burning through the tops of trees was quite common.



Small, medium and large trees were killed or so severely damaged that many a salvage cut was necessary, leaving thousands of acres in need of replanting to forest trees.

Normally, the fire season in South Carolina starts building up around the middle of December and extends through the month of April. During an average year the highest rate of occurrence, largest acreage losses, and greatest difficulty of control are experienced in the lower coastal plains. The majority of fire losses are usually experienced during one or more brief adverse weather periods, which can normally be expected from January through April. This year the season started with a blowup during the first week of December and most of the spring losses were recorded in the sand hills rather than the coastal area.

Early Winter Blowup:

A deficiency of 2.48 inches in precipitation during the month of December linked with very brisk winds created a hazardous forest fire situation, and resulted in unusually high losses particularly during the first week. In a brief two-day period, December 6 and 7, some 326 fires burned 8,600 acres. The coastal plains suffered most of the losses during this early blowup.

Spring Blowup:

The last appreciable rainfall was experienced on March 4, 1966 and dry weather prevailed through the first week of April. Forest fire-weather started building up very rapidly after the middle of March and reached a disastrous peak during the first three days of April.

The big Killian fire in Richland County, which started during the early afternoon of Sunday, March 20 and burned 3,188 acres before it was placed under control some seven hours later, signaled the real beginning of the spring blowup. During the sixteen-day period from March 18 through April 3 the Fire Control Organization experienced 1,750 fires which burned approximately 90,000 acres. April 1 proved to be the most disastrous day of the year when some 203 fires burned 28,000 acres. April 2 followed closely with 169 fires burning 25,000 acres, and April 3 registered 109 fires with a loss of 12,000 acres.

All firefighting resources of the state Fire Control organization along with those of thousands of individuals from wood-using industries, landowners, and other volunteers were pressed into one of the most intensive and conscientious suppression efforts ever recalled. National Guard units were mobilized

throughout the sand hills and upper coastal plains section of the state. The U. S. Weather Bureau office at the Columbia Airport kept fire control personnel completely informed of prevailing conditions and anticipated weather changes. The forest industries of the state, as well as many private contractors and citizens utilized all available equipment and personnel at their disposal in the firefighting effort. Valuable assistance was also rendered by the Salvation Army, Red Cross, aircraft services and owners of private aircraft, municipal and rural fire departments, restaurant owners, Civil Defense, Southeastern Forest Experiment Station, and many other volunteers.

During the early morning hours of Friday, April 1, an urgent plea was received from district foresters in Orangeburg and Camden Districts for additional personnel and mechanized firefighting equipment to assist with fires still burning out of control from the day before. By this time practically all counties of the state were experiencing extreme fire difficulties and only a few suppression units were available for dispatch from their assigned counties. The sand hills section was particularly hard hit with a series of fires extending all the way from the Savannah River to the North Carolina line. Some were burning out of control and many had reached major proportions.

A dry cold front moved into the northwest corner of South Carolina during the early morning hours of April 1 and reached the central or sand hills area at 1 p.m. At this point it slowed its forward speed and did not move out of the sand hills until around sunset. Ground wind speeds averaged 30 miles per hour with gusts up to 45 and 50. Relative humidity dropped to 20 percent. The passage of this front brought turbulent air, drastic change in wind direction, and created an almost hopeless situation. Fires were spotting a quarter to one-half mile ahead of the control lines. Highways, railroads, and natural barriers had little effect on stopping the forward movement of the larger fires. Backfiring was difficult to control and ineffective. Fire suppression personnel usually take good advantage of rising humidities and lull in wind speeds from sunset until sunrise to place fires under control. However, very little relief was experienced during the night of April 1 and fire crews and tractor equipment continued on without rest.

At daybreak on April 2 the situation appeared as hopeless as the day before, only even more so. Some fires had been burning

out of control for several days and in the meanwhile new ones had started, all adding greatly to demands for additional equipment and personnel which were not available. Fires on April 2 were handled by fatigued personnel who had fought continuously without sleep or rest for two days. After long hours of hard usage many pieces of mechanized equipment were beginning to fail. Several tractors had been trapped and burned. At this critical time when everything was needed, the loss of suppression units tremendously handicapped the fire suppression effort. Equipment maintenance personnel were kept busy day and night. Aircraft with two-way radio and fire control observers directed fire suppression operations from daylight until after dark in all districts of the state. The Commission of Forestry's radio communication system was in continuous use relaying vital messages to administrative officers, fire bosses, suppression crews and equipment operators.

Around midnight of Saturday, April 2, several of the serious fires were fairly well contained and a limited number of personnel were relieved for a few hours sleep and rest prior to resuming the attack at daybreak on April 3. Fires in Berkeley, Calhoun, Aiken, Lexington, Kershaw, and Marlboro were still burning out of control and no relief was in sight for weary firefighters.

On Sunday morning, April 3, there was still more than enough fire for everyone. Winds continued strong and by mid-afternoon the relative humidity dropped to 16 percent. The greatest difficulties at this time were being experienced with fires burning in Chesterfield and Marlboro Counties. The others, even though controlled, were still smoldering and required constant attention from the patrol crews. By late afternoon there appeared for the first time a slight hope that the uncontrolled situation might improve. Just after dark on April 3, the fire-weather forecaster at the Columbia Weather Bureau advised that a weather front would enter the state during the first part of the night and would bring general rains over the entire area by morning of the following day. This communication to all districts, counties, and fire bosses became a reality and thousands of weary firefighters departed the charred, dampened woods for their first night's rest in three days.

Forest Management

The forest management program has remained at about the same level of operation for the past five years. The major emphasis of the Commission's management program was directed toward assisting small private owners in the management of their woodland properties. More than one-half the total woodland area of the state has been examined by a forester and recommendations made for better timber production.

The 1957 Forest Survey shows 77 percent of South Carolina's woodland owned by small private landowners; public ownership was 9 percent and industry ownership 14 percent.

Technical forestry personnel of the State Commission of Forestry offers forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner in writing recommendations covering the work that should be done to improve the stand, maintain it in a productive condition, harvest timber products or any reforestation work necessary on idle or understocked areas. Also included are recommendations for protection from fire, insects and diseases.

During 1965-66 the Commission had a total of 26 men devoting full time to the forest management program, including the small watershed activities. These 26 men assisted 1,804 landowners with primary forest management plans and handled 1,315 requests for the Agricultural Stabilization and Conservation Service. Sixty-two field inspections of Conservation Reserve plantings were made. These men also marked 386 tracts covering 12,229 acres amounting to 14,109,949 board feet of sawtimber and 13,528 cords of pulpwood. There were 12 active watershed projects on which critical area planting and gully control work and/or technical forestry assistance was carried out.

The personnel were just able to keep up with requests from landowners for forest management assistance. In some areas requests could not be handled for two to four weeks after being received.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowners to employ a private consulting forester. Commission foresters also work closely with industry foresters who give direct assistance to landowners.



A Commission forester, at no charge, will examine timberland for any landowner and write a management plan with recommendations for practices needed.

Landowners continue to receive reasonably good prices for selectively marked sawtimber and pulpwood. The demand for all forest products was steady and prices remained firm.

The southern pine beetle epidemic which killed an estimated one hundred million board feet of timber in 1962 subsided and now is at a normal level.

The Commission continued to work with Clemson University on a number of research studies. No new projects were undertaken.

The Management Branch continued to train qualified rangers on some non-fire jobs such as insect and disease control activities and some phases of the A.S.C. Program. Orangeburg, Lexington, Edgefield and Chester Counties had Forester-Rangers employed. These technical rangers handled not only fire protection work but much of the forest management assistance program for the county.

The State Commission of Forestry continued to operate four state forests. Combined area of these state forests represents about one percent of the total forest area of the state. Experi-

mental and demonstration work and all forms of multiple use forest management activities were continued on these forests. The special program to rehabilitate unproductive scrub oak lands on the state forests will be completed in May 1967. Almost 35,000 acres have been cleared and reforested since the program was authorized six years ago. All of this work is accomplished with receipts from state forest timber sales, rentals, etc.

The four state tree nurseries were in operation in 1966. However, the Ridge Nursery operation was on a limited basis. The Ridge Nursery was reduced to a standby basis in May 1965. Small lots of trees and cover crop seed for other nurseries will be produced here in 1966-67.

Some of the new programs initiated by the federal government such as "Rural Area Development," "Appalachia" and related programs, required considerable time of technical personnel.

FOREST SURVEY

During the year plans were made for a new statewide inventory of South Carolina's forest resources. Field crews are scheduled to start working in August 1966 on the first of more than four thousand plots to be measured in the state during the next twenty months.

Detailed surveys to determine the condition of South Carolina's timber resources were made in 1936, 1947, and 1958. South Carolina will be the first southeastern state to have four forest surveys.

Comparison of survey findings reveals changes and trends in timber growth, volume, quality, ownership, and utilization which are valuable to woodland owners and to existing and prospective forest industries. The surveys also identify forestry problems and opportunities. This helps plan activities to improve and develop South Carolina's largest crop, covering some 12 million acres of the 19 million acres of land in the state.

About two years will be needed to measure, compute, analyze and report results of the statewide survey. However, preliminary statistics and information will be released as work is completed in the three units into which the state has been divided, the piedmont, northern coastal plain, and southern coastal plain.

The Forest Survey will be made by the Southeastern Forest Experiment Station of Asheville, N. C., a research unit of the U. S. Forest Service.

MANAGEMENT ASSISTANCE

The 26 man years of forest management time of field foresters were directed toward assisting private landowners with their woodland management problems. The three Clemson University Extension Foresters assisted in this program, primarily with promotional and demonstration effort.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, insect and disease control and protection, timber stand improvement work and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement, and a sample timber sale agreement. The charge for this service is 75 cents per thousand board feet and 25 cents per cord for timber actually marked and tallied. All other services are provided free of charge.

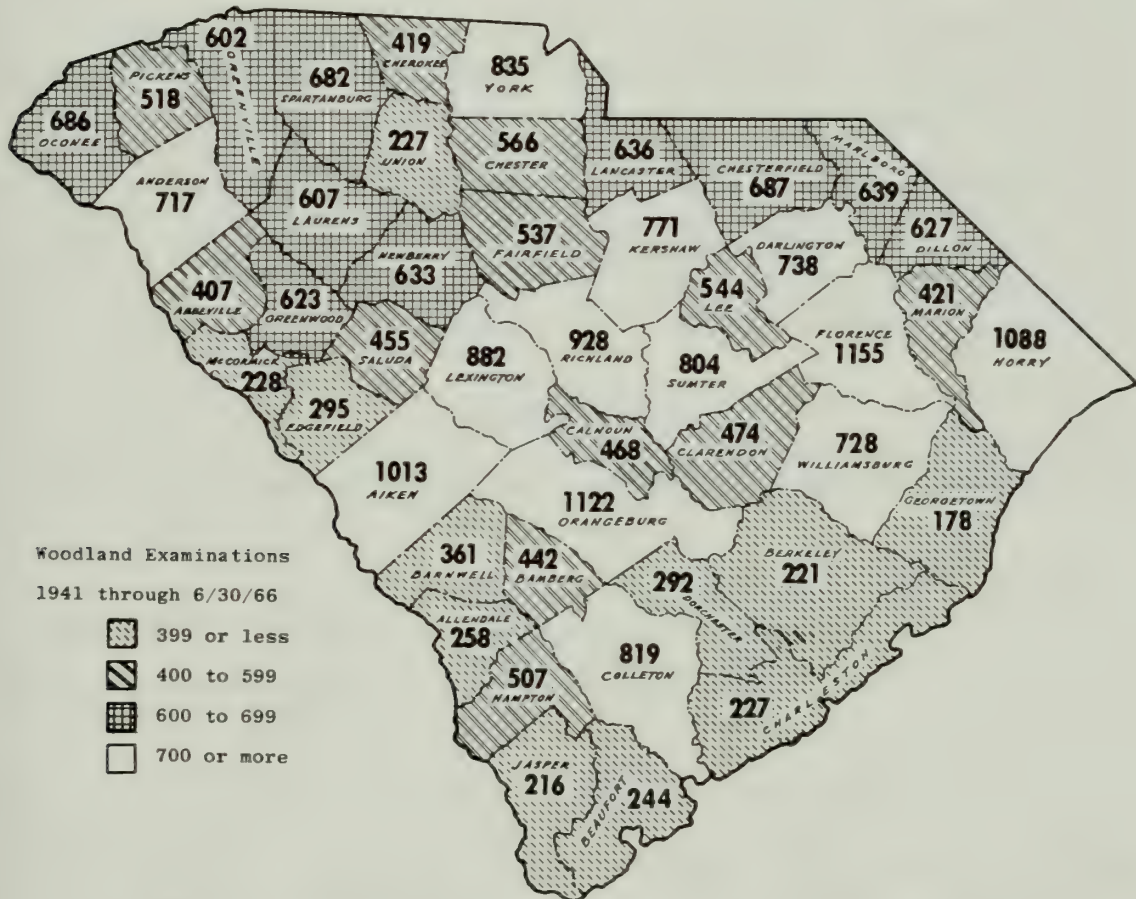
Timber stand improvement recommendations are also included in the woodland examination writeups. This includes measures necessary to control the undesirable or worthless brush or trees in a stand to increase or release the more desirable trees. This cull tree removal program is probably the largest single forest management problem facing South Carolina woodland owners.

In addition to the above, recommendations are also given on prescribed burning in pine types in the coastal plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seedbed preparation, control of "brown spot" disease of longleaf pine and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis with the landowner of the forest conditions so that probable damages of prescribed fire can be compared with expected benefits.

During the year, Commission foresters made 1,804 examination of 207,026 acres of forest land, and selectively marked

14,109,949 board feet of sawtimber and 13,528 cords of pulpwood for 386 landowners on 12,229 acres of forest land.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and District office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,500 telephone calls regarding insect and disease control and made more than 475 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.



Field foresters of the Commission are responsible for checking all areas where landowners request forest practices to be carried out on their property under the Agricultural Conservation Program. In 1965-66 a total of 1,721 landowners accomplished one or more forestry practices under the Agricultural Conservation Program. A total of 1,315 field checks were required and made by Commission field foresters.

Commission foresters were able to service requests for assistance with not more than about one month's delay on any requests. Most projects had one to four weeks work scheduled ahead.

There was a slight decrease in ACP requests, however. The increase in new programs initiated at the national level is requiring considerable time of the local CFM foresters.

CONSULTING FORESTER ACTIVITY

Commission and Extension foresters continued to follow the practice of referring all larger jobs to consulting and industry foresters wherever practical. Our records show 300 jobs referred to consulting foresters and 68 jobs referred to industry foresters during the year where properties were examined by Commission or Extension personnel. It is estimated that more than 100 jobs were referred to consulting foresters through contact with Commission and Extension foresters but where no field work was done by Commission personnel.

Commission and consulting foresters met together for a training school on "Forest Economics". Through these and other efforts there exists an excellent working relationship between consulting foresters and the Commission.

UTILIZATION

Sawtimber and Pulpwood Stumpage Prices for South Carolina Five-Year Period*

Fiscal Year	Weighted Average stumpage price per M board feet Scribner Tree Scale	Weighted average stumpage price per standard cord
1961-62 -----	\$33.89	\$6.43
1962-63 -----	32.89	6.24
1963-64 -----	32.05	6.60
1964-65 -----	34.89	6.88
1965-66 -----	35.00	7.17

* Sales of timber marked by Commission foresters on private property.

Sawtimber and pulpwood prices remained steady during the year. Prices and demand were more firm than any time since 1957. More hardwood demand was evident for sawtimber, veneer and pulpwood. Exact figures are not available on sawtimber production, however, the estimated production figure is up from 1963.

There was no appreciable expansion in sawmills in the state during 1965-66. Some existing mills made improvements both on quality and quantity of manufactured items. The use of slabs and other sawmill residues for pulpwood chips continued to increase.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so that the highest financial returns can be obtained over a long period of time.

Most larger landowners and forest industries are now using good management practices on their own land. Many of them have hired full time or part time foresters.

The pulp and paper companies continued to furnish the services of their foresters to assist landowners with proper thinning of pulpwood. According to estimates of the Southern Pulpwood Conservation Association, more than two-thirds of the total pulpwood cut is from stands where minimum forest practice standards are met.

A two-day training school was held in May for all technical men in an effort to keep these men informed on new developments in forestry. One day of this training school was attended by consulting foresters.

A number of meetings were attended with industry foresters in an effort to acquaint all personnel with problems of practical logging and management practices.

COOPERATIVE FOREST MANAGEMENT

During the year 22 cooperative forest management projects were operated in the state. The total technical man-years devoted to forest management activities, including Cooperative Forest Management, Agricultural Stabilization funds, Conservation Reserve Program and Watershed Program were 26.

WATERSHED PROJECTS

A program to control water on the small watersheds and to protect from overflow the bottomlands along the smaller streams was initiated some years ago through Public Law 566. U. S. Forest Service has transferred its responsibilities to the S. C.

State Commission of Forestry through an agreement. There were 12 Public Law 566 projects in operation in the state.

Preliminary examinations have been made on 48 separate areas to determine the feasibility of beginning new watershed improvement works on these areas. A description of some of the activities accomplished on the 12 areas of operation follows:

TWELVE-MILE CREEK PILOT WATERSHED

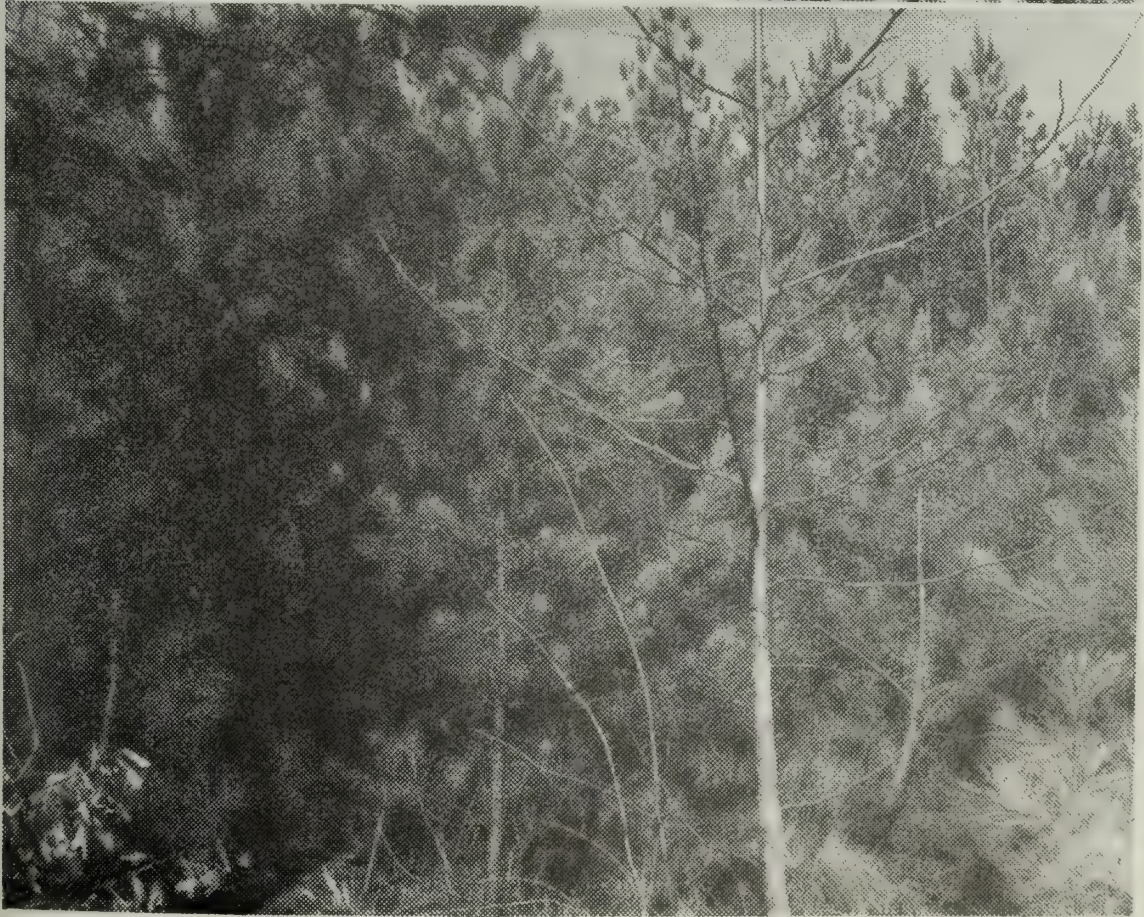
The Pilot Watershed on Twelve Mile Creek in Pickens County closed July 1, 1965. During the 10 years this watershed was active, 6,790 acres were planted to pine trees by the State Commission of Forestry in cooperation with U. S. Forest Service and Soil Conservation Service. Of this acreage, 4,147 acres were critically eroded. Much of the area was so eroded it required brush check dams, mulching and planted grasses to give a desirable site for planting. Technical foresters' assistance was given to all woodland owners requesting help in improving their woodlands. Timber management plans were prepared for 95 landowners. Some type assistance was given to 1,247 separate requests made by the 790 farmers in the watershed. The accomplishments made by the landowners during the life of this project should stimulate good forestry practices and improvement in hydrologic conditions in the future.

CONEROSS CREEK WATERSHED PROJECT

The Coneross Creek Project located just west of Walhalla in Oconee County completed its ninth year's operation. A total of 53,000 trees were planted on 53 acres. This makes a total of 2,559 acres of critical area that has been planted to trees. A total of 24 land examinations were made covering 1400 acres on the watershed area.

BIG CREEK WATERSHED PROJECT

This was the third year's operation for this project. Twelve acres were planted to pines. Another ten acres were planted for watershed protection by private landowners. Five woodland examinations were made covering 279 acres. Brush dams and mulching was done on 26 acres before tree planting.



Watersheds on which the Forestry Commission directs tree planting activities tell many success stories. Severely eroded land has been planted to trees, erosion has stopped and trees are growing well.

THREE AND TWENTY WATERSHED PROJECT

This was the second year for operation of this project. Fifty-one thousand five hundred trees were planted for flood prevention on 72 acres which were treated for gully control. An additional 60 acres were planted for watershed protection by landowners. Sixteen woodland examinations covering 865 acres were made by the project forester.

DUNCAN CREEK WATERSHED PROJECT

This was the third year's operation for this project. Some 50,000 loblolly pine seedlings were planted on 63 acres of critically eroding land. In addition, 565 check dams with love grass were constructed to stabilize the soil on 37 acres. Other tree planting amounted to 207 acres, bringing the total planted during the three years' operation to 1,046 acres. Seven woodland plans were made covering 1,560 acres.

THICKETY CREEK WATERSHED PROJECT

This was the fourth year of operation for this project. Critical area tree planting was accomplished on 167 acres. Other planting amounted to 106 acres. Check dams, love grass planting and other erosion control work was carried out on 124 acres. Twenty-eight woodland examinations and plans were made covering 1,272 acres of woodland.

During the four years of operation, 516 acres have been planted to trees for watershed protection, 498 acres have been planted on critical areas and management advice and recommendations given to 149 landowners covering 7,067 acres.

WILLOW, WILSON CREEK, MITCHELL SWAMP-PLEASANT MEADOW, BEAVERDAM (EDGEFIELD COUNTY), BROADMOUTH, FISHING CREEK, and MAPLE SWAMP WATERSHED PROJECTS

These watershed projects have no critical area tree planting or gully control work planned. They are active because of the need of tree planting for watershed protection and intensified woodland management. Commission foresters made 36 woodland examinations on 1,851 acres in these watersheds. Also, landowners planted some 330 acres for watershed protection and did hydrologic stand improvement work on 1,729 acres of existing woodlands.

STATE FORESTS

Cassatt State Forest -----	462 acres
Harbison State Forest -----	2,202 acres
Manchester State Forest -----	28,830 acres
Sand Hills State Forest -----	92,000 acres
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TOTAL -----	123,494 acres

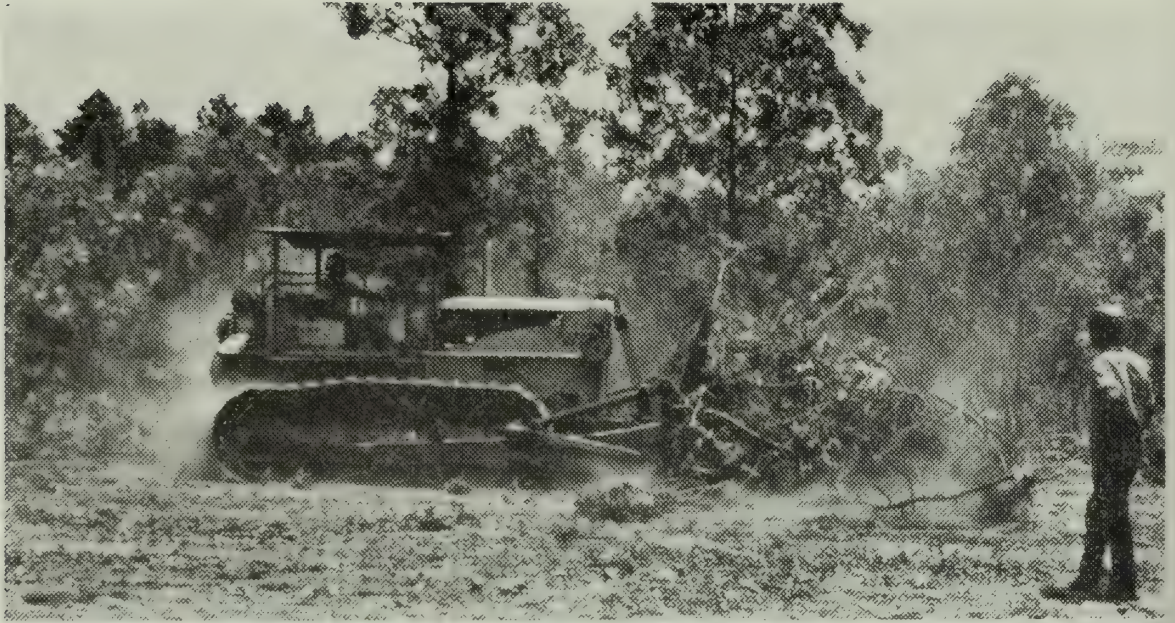
Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees and developing an adequate wildlife management program.

Through an intensified scrub oak eradication program, much of the land on state forests needing this treatment has been covered. The remaining acreage needing clearing and planting will be cleared as demonstration and experimental areas (at the rate of 200-500 acres per year) in the testing of the many new herbicide chemicals and improved mechanical methods of preparing scrub oak land for planting. Approximately 39,056 acres of scrub oak land have been cleared and replanted to pine since acquisition by the state. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from the forests. All cutting was designed to improve both growth sawtimber and pulpwood from three of the four forests. All cutting was designed to improve both growth rate and quality of the remaining timber.

The 1960 Legislature passed an act enabling the Commission to use receipts from state forests to speed up the reclamation of scrub oak lands. This program enabled the state to clear approximately 5,000 acres during 1960-61; 5,949 acres in 1961-62; 5,893 acres in 1962-63; 6,163 acres in 1963-64; 3,397 acres in 1964-65; and 1,883 in 1965-66. This program is drawing to completion and will be terminated in May 1967.

DEMONSTRATIONS AND MEETINGS

Several large group meetings were held at the state forests to show some of the results of research and experimental work. In addition, a large number of individuals and small groups visited the areas to observe methods and results of scrub oak reclamation to productive forest land.



More than 39,000 acres of state forest land has been cleared of weed trees, planted to pine, and put into full production since 1960 when the General Assembly authorized use of timber receipts for this purpose.

PAYMENT TO COUNTIES

Twenty-five percent of the gross receipts of all state forest operations are paid to the counties in lieu of taxes. This year's payment by counties was as follows:

Chesterfield (Sand Hills State Forest)	\$50,760.58
Sumter (Manchester State Forest)	29,729.84
Richland (Harbison State Forest)	4,576.34
Darlington (Sand Hills State Forest)	311.50

In the past 10 years the Forestry Commission has paid a total of \$570,793.37 to counties where state forest lands are located as follows:

Chesterfield	\$315,066.78
Sumter	224,256.59
Richland	30,261.14
Kershaw	897.36
Darlington	311.50

The forester who was employed to coordinate research and experimental work for the Commission was continued this year. Most of the Commission's research efforts were through cooperative studies with either Clemson University or Southeastern Forest Experiment Station.

CASSATT STATE FOREST

The area comprising this forest lies about two and one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a fire tower and dwelling for the towerman were erected. Also, a small amount of pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained annually a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property.

Almost all of this forest is now in production and only a small amount of timber stand improvement work is needed to maintain a good state of production.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires burned on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving the stand and maintaining rapid growing conditions is in effect. During the 19 years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a substantial amount to the state treasury. This year 371,815 feet of sawtimber and 346 cords of pulpwood were sold which brought in a total of \$18,305.37.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the federal government. Fee title to this property was received by the state on June 28, 1955. Approximately 8 percent of this forest is still in an unproductive state. It is on this area that the major silvi-cultural activities are being directed. Most of the old fields except those being farmed have been planted. The clearing of worthless scrub oak lands and planting to pine is proceeding rapidly and will be completed with the exception of small demonstration areas this fiscal year.

Six hundred acres of land were rented for agricultural purposes during the year. Some of the tenants renting this land work part time on the forest.

In addition, 22 acres of newly-cleared scrub oak land were rented for one season to watermelon growers.

GAME MANAGEMENT

An intensified program of game management has been introduced in cooperation with Sumter Game & Fish Association. In addition to the utilization of "waste acres" under power lines, permanent wildlife fields and food patches have been established. Work continues on the five fishing lakes on the forest.

Tree Planting:

A total of 700,000 trees was planted on the forest during the year consisting of 500,000 slash and 200,000 longleaf pine.

Forest Products Sold and Other Receipts, 1965-66:

Sawtimber—1,741,881 board feet -----	\$ 75,725.23
Pulpwood and posts—3,761 cords -----	38,162.14
Rentals, leases and miscellaneous -----	9,076.48
	<hr/>
TOTAL RECEIPTS -----	\$122,963.85

Silvicultural Practices:

With the aid of funds made available by the 1960 Legislature, the major job of reclaiming scrub oak lands proceeded on schedule. Three hundred thirty-one acres were cleared by root raking and 420 acres were plowed. Of the 428 acres plowed, 22 were rented for watermelon production. The total amount cleared of scrub oak and planted to pine on this forest is now 8,276 acres. One hundred ninety-nine acres were treated with mist blowing, 74 acres treated for hardwood control by other methods and 662 acres prescribe burned.

Monthly checks were made for insect and disease damage. Research in cooperation with the Southeastern Forest Experimental Station is being continued. *Fomes annosus*, a root rot disease, is taking an increasing toll of timber, especially in the slash pine plantations. Studies of how to combat this problem continue.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester State Forest as a target range for training jet pilots in air-to-ground gunnery. According to the Air Force, damage will be confined to a few hundred acres. A more realistic rental for this area was secured as of January 1, 1966, to compensate for loss of timber growth and denial of access to the area involved.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak-longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and

Wildlife Service as a wildlife refuge, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the federal government on a 95-year lease. During the fiscal year 1965-66, the receipts from sales and rentals since acquisition exceeded all monies expended by the state on this area. All revenue from this forest over operating expenses is now to be expended on the area for further multiple use improvements.

Before the area was acquired by the government it was heavily cut over, badly burned and generally abused. As a result, major activities have consisted of tree planting, fire protection, and other practices aimed at building up the productivity of the land and increasing the forest stand. Through the use of recently obtained forest inventory information the cut and distribution of the various age groups of timber will be regulated.

Tree Planting:

Most of the longleaf was planted on the Fish and Wildlife Refuge portion of the property. Most areas were machine planted, although some hand planting was necessary in rough cleared areas on experimental plots. The total planted on the forest during 1965-66 was 3,745,500 seedlings; (1,080,000 slash pine, 2,663,000 longleaf pine, and 2,500 miscellaneous species).

The total planted on the forest since its establishment amounts to 35,962,500 seedlings. Approximately 34,245 acres have been successfully reestablished to pine.

Forest receipts for the year are listed below:

Forest products	\$194,068.77
Watermelon and other agricultural lands and miscellaneous receipts	8,160.55
Hunting permits	2,059.00
TOTAL	\$204,288.32

Recreation:

The Sugar Loaf Mountain area has been re-opened after erosion control measures were taken. The area around the lake continued to receive heavy use. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and

latrines. The fifteen Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Scout Camporees also use the area.

Fish and Wildlife:

Hunting and fishing is conducted in season by permit on the forest area. Close cooperation by the Commission of Forestry, the State Wildlife Resources Commission and the U. S. Fish and Wildlife Service prevails. Deer, dove and quail food patches are planted and maintained by the Commission of Forestry.

Fishing is allowed in Sexton's Pond, Sugar Loaf Mountain Lake and Campbell's Lake.

Dove hunting was permitted on the state forest portion of the Sand Hills State Forest, one thousand eighty-one permits at \$1 each were issued. In addition to the dove hunts, the area was opened to quail and squirrel hunting. Two hundred thirty-five daily quail permits at \$1 each and 129 season permits at \$5 were sold. Ninety-eight squirrel permits at \$1 each were issued. Rye, peas and millet were planted and maintained for game food.

FOREST INSECT AND DISEASE CONTROL ACTIVITIES

The Commission of Forestry cooperates with the Crop Pest Commission in a forest pest detection system. Currently the system involves reporting of insect activity on permanent observation areas and casual reports of insect and disease activity of significance. Two observation areas are checked periodically in each county, one for pine bark beetle activity and the other for pine tip moth activity. The observation reports provide a systematic buildup of data on pest occurrence, damage and the relationship of the woodland environment to the pest. Twenty-eight non-technical rangers assist foresters in making the periodic checks of observation areas and reporting pest activity. Industrial foresters also cooperate by reporting "casual observations" of significant insect or disease activity.

To supplement observations made by field personnel an abbreviated aerial survey was made through 38 counties in the state during June 21 and 22, 1966. The survey was designed to observe some of the large private woodland holdings not usually observed from the ground. Although more spots of dead or dying trees were observed than the previous year, very little insect

activity was found at these spots by foresters making "ground checks".

Bark beetle populations were low during the fiscal year on private land. Very little control action was needed and applied. The U. S. Forest Service reported low bark beetle populations during the year except for the Francis Marion National Forest. A potential outbreak was reported on this forest in February but had subsided by the end of June. The Forest Service has a continuing control program of chemical treatment and salvage of southern pine beetle infested trees.

Commission foresters made approximately 475 field checks for insect and disease damage. Recommendations were given the landowners regarding treatments necessary to control or check the spread of the forest pest. Many additional requests were handled by telephone where a field check was not necessary.



Commission foresters made 475 field checks of insect and disease damage. Many more requests for information were handled by telephone. Recommendations for treatment were given in each case.

NURSERIES

Four forest tree nurseries were operated during the year producing and distributing to landowners 42,310,685 seedlings for planting during the 1965-66 planting season. An additional 14,218,500 seedlings were either produced or brought into the state by others. The cost of seedlings grown at Commission nurseries was \$4.50 per thousand f.o.b. the nursery or \$5.50 if the seedlings were shipped to the landowners.

The demand for seedlings decreased more than anticipated with a total reduction in seedlings planted from all sources of 4,154,000. Since the Cropland Adjustment Program will be in effect next year, it is anticipated that seedlings sales will remain at the present level. Since 1928, a period of some 38 years, 1,417,787,529 forest tree seedlings have been planted in South Carolina.

FOREST TREE NURSERY ACTIVITIES

The four forest tree nurseries operated by the Commission are: Horace L. Tilghman (near Wedgefield in Sumter County); Piedmont (near Sunset in Pickens County); Coastal (near St. George in Dorchester County); and Ridge (near Trenton in Edgefield County).

Distribution of Seedlings:

During the year a total of 56,529,185 forest tree seedlings were distributed. Of this total 42,310,685 were produced in the four state nurseries. Out-of-state plantings of state nursery produced seedlings amounted to 721,500.

Loblolly Pine	18,750,105
Slash Pine	19,124,250
Longleaf Pine	3,280,600
White Pine	226,925
Redcedar	150,805
Yellow-poplar	267,100
Miscellaneous	510,900
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Total	42,310,685

In addition to the above seedlings distributed by Commission nurseries, 14,218,500 seedlings were brought into the state by landowners or produced in the state by industry nurseries.

Tables 9 and 10 in the appendix are a record of seedlings distributed by counties and class of ownership. Table 11 shows the total acreage planted by counties and acres in need of planting.

The following table records the number of seedlings distributed in South Carolina by years, including out-of-state seedlings:

YEAR	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Inc. Other Sources)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255
1946-47	1,962,600	1,962,600
1947-48	11,356,990	11,356,990
1948-49	30,338,775	30,338,775
1949-50	29,501,955	29,501,955
1950-51	20,615,315	20,615,315
1951-52	16,619,000	16,619,000
1952-53	22,035,850	32,246,298
1953-54	36,210,100	42,852,314
1954-55	35,373,025	45,182,255
1955-56	34,413,550	42,931,755
1956-57	55,753,600	69,658,736
1957-58	60,846,200	93,369,084
1958-59	123,985,000	166,351,000
1959-60	147,146,365	187,516,418
1960-61	145,609,075	158,330,575
1961-62	71,892,420	83,844,470
1962-63	56,191,241	64,201,541
1963-64	51,445,597	62,423,597
1964-65	49,009,893	60,683,493
1965-66	42,310,685	56,529,185
TOTAL	1,380,917,429	1,417,787,529

Forest Tree Seed Collection:

Each year the Commission collects cones to obtain seed for tree seedling production. The field offices of the Forestry Commission locate private collectors in good seed producing areas to obtain the quotas which are set. This year cones and seed were collected as follows: longleaf pine 8,001 bushels; loblolly pine 561 bushels; slash pine 342 bushels; white pine 252 bushels; yellow-poplar 280 bushels; black walnut 129 bushels; redcedar 400 pounds; Virginia pine 20 bushels; sweetgum 15 bushels.

The seed extractory was operated for the eighth year with continued good results. The average cost of seed to the state since the operation of the seed extractory is \$1.65 per pound compared to \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Seedling Survival Examination:

After seedlings are outplanted one year by landowners, approximately 10% of the seedlings planted in each county are sampled to determine the over-all state survival rate. Through these examinations, the Forestry Commission can determine steps to take to eliminate future plantation failures on the part of the landowners. This year the over-all state seedling survival rate was estimated at 72% compared to 77% for the previous year.

Research:

Research activities in cooperation with Clemson University were continued. Three projects dealing with seed source studies were continued. Two of these studies are concerned with developing better Christmas tree seedling stock. One new study concerned with control of disease in redcedar seedlings was initiated.

Forest Tree Improvement:

The program for establishing 150 acres of seed orchard was continued. A total of 5,969 grafted plants have been planted in the Burnt Gin Seed Orchard and 2,000 grafted plants have been planted in the Coastal Seed Orchard. Of this total 3,165 plants were established during the fiscal year.

During March and April 1966 approximately 3,500 new grafts were made at the four nurseries on rootstock in nursery seed beds and on rootstock planted in the Coastal Seed Orchard. The grafts made this fiscal year should complete 100 acres of seed orchards.

The selection of superior trees was continued. A total of 9 superior trees were graded and approved for orchard use during the year. Since the tree improvement program was initiated, a total of 126 trees have been graded. During the year the superior tree selection program for longleaf pine was continued.



Cuttings from superior trees, obtained by climbing or shooting . . .



... are grafted on seedlings from the nursery and planted in seed orchards to produce seed for superior seedlings to fill the future demand.

The Forestry Commission continued as a member of the North Carolina State University-Industry Tree Improvement Program. Membership in this program makes available the services of forest geneticists, who provide the technical services which are necessary in a tree improvement program.

Anticipated 1966-67 Seedling Production:

Planned production of seedlings for the 1966-67 planting season is approximately 50,000,000. Species for distribution will include loblolly, slash, longleaf, shortleaf, Virginia pine, white pine, yellow-poplar, black walnut and redcedar.

State Parks

"Our parks and preserves are not mere picnicking places. They are rich storehouses of memories and reveries. They are guides to the weary and faltering of spirit. They are bearers of wonderful tales to him who will listen; a solace to the aged and an inspiration to the young". Richard Lieber

GENERAL

Following two years of limited state park operation the future for South Carolina's state park system looms bright again.

Acting on authority granted by the 1966 General Assembly, the State Commission of Forestry meeting on June 21, 1966 authorized full use and operation of all facilities in all state parks starting July 1, 1966.

The following is the text of the authorizing Legislative Act:

"Notwithstanding the provision of Section 51-2.1 through 51-2.4, the State Commission of Forestry shall open any state park to public use for such normal recreational, educational and forestry purposes and uses, and for such hours of operation as it deems advisable".

There is much work and several major problems to overcome before all facilities in all parks can be made ready for full and complete use.

After nearly three seasons of idleness the swimming beaches need resanding, the bathhouses need reconditioning and vacation cabins made ready for the long awaiting users. Before authorized swimming can be initiated there exists the problem of securing the necessary summer personnel of qualified lifeguards and bathhouse attendants. Added to this will be the arranging for funds with which to pay their wages. This difficulty arose because the 1966-67 state appropriations bill was passed while the parks were still on a limited operating basis, and prior to the passage of the Legislative Act permitting full use of all facilities.

It is hoped and believed that the necessary funds will be made available.

The 1965-66 fiscal year brought intensified action in regard to our participation in the National Outdoor Recreation plan. In order to qualify for full participation in the program a detailed five-year state park development plan was compiled in co-operation with the Bureau of Outdoor Recreation.



After a period of only partial use the Commission of Forestry made plans for full use of state park facilities under authority granted by the General Assembly.

The plan includes the:

History.

Annual use and attendance.

Facility inventory.

Facility expansion of present areas.

Facility expansion of undeveloped areas.

New area acquisition.

Recommendations.

This five-year plan is designed to better meet the increasing need and demand for wholesome outdoor recreation, and to fulfill the role of the state parks as major attractions for tourists so essential to the state's economy.

Fifty percent of the \$3,007,000 cost of the five-year plan is reimbursable on authorized projects from the Federal Land and Water Conservation Fund Act.

From capital improvement funds previously appropriated for specified projects the following improvements were made:

The community recreation building that was destroyed by fire at Chester State Park was replaced. Two latrines, three picnic shelters and office, first aid and concession building were added at Huntington Beach State Park, also a large paved parking area to serve these facilities. The parking area at the Myrtle Beach State Park Fishing Pier was paved and an extension added to the concession shelter of the pier.

Due to the continued erosion a new family camping area with modern latrine facilities and two new change houses were added at Hunting Island State Park.

Requests for project reimbursement are being filed with the Bureau of Outdoor Recreation for these improvements.

Further indications of a bright future for our state park system are the proposed addition of two new state park areas: Baker Creek State Park on the Clark Hill Reservoir and Sadlers Creek State Park on the Hartwell Reservoir. These areas are slated for development beginning July 1, 1966. Capital improvement funds available July 1, 1966 were appropriated for the first time in many years.



Cool shade and clear streams provide for healthful recreation for South Carolinians of all ages and an increasing number of out-of-state visitors.

Forest Development Program

A 1965 state Act authorized the Forestry Commission to undertake a seven-year program of scrub oak eradication, timber stand improvement, reforestation, and other forestry development work on some 30,000 acres of the 48,000 acres of state park lands.

The program is limited to the larger state parks, and is confined to areas not now used or needed in the immediate future for recreational use. The work will be done without impairing the value and attractiveness of the state parks for recreational purposes, and will actually enhance the future recreational value of many of the areas.

Revenue from timber harvests will be used to finance the program of reforestation some 5,000 acres and timber stand improvement work on approximately 2,000 acres of state park lands.

Bringing these state-owned lands into fuller production will yield substantial revenues to the state and the counties. This program will demonstrate how forest lands may be managed for multiple use, including forest products, wildlife, recreation, soil and water conservation, and the enhancement of natural beauty.

The receipts from the program are allotted 50% for program operation, 25% to the counties in which state parks are located, and 25% to the state general fund.

Total receipts for 1965-66 were \$62,983.17 allowing \$31,491.59 for operating expenses; \$15,745.79 to counties and \$15,745.79 to the state general fund as park revenue.

Attendance

With one park (Edisto Beach) still closed and all others operating on a limited basis the 1965-66 fiscal year attendance of 1,673,143 was far below the normal past park use of more than 3 million annually. A detailed table included in this report gives individual and total park use.

The banning of vacation cabin use, the banning of family camping at Myrtle Beach and Santee State Parks, and prohibition of swimming at all parks except Hunting Island are the contributing factors in the decline in park attendance in 1965-66 as these facilities are in heavy demand by park users.

Again the heavy demand for our 65 family vacation cabins had to be denied and some 1,000 families had to seek reservations elsewhere.

Revenue

The 1965-66 annual park revenue of \$32,399.48 reflects the 'non use' of our major revenue producing facilities.

Under normal unrestricted use in all parks an estimated revenue of more than \$200,000 is anticipated in fiscal year 1967-68. Revenue should increase in succeeding years proportionately with increases in park attendance.

Appropriations

The 1965-66 operating budget appropriation of \$368,516.00 reflected the feeling of the 1965 Legislature as being adequate for operating the state parks on a limited use basis. This restricted budget, however, necessitated curtailment of normal maintenance and repair programs. A serious buildup of delayed maintenance is resulting to the extent that some of the older buildings may have to be replaced.

There is concrete evidence that a requested budget for capital improvements will be given serious consideration for inclusion in the 1966-67 budget appropriation as well as a 10% salary increase.

Such action will certainly give a big morale boost to all personnel and will be renewed life to the overall parks planned development program.

Historical

The increasing number of visits to the historical areas maintained and supervised by the Division of State Parks is very encouraging.

Continued restoration work was carried on at Rose Hill Mansion in Union County and at Old Fort Dorchester in Dorchester County. New highway historical markers are directing visitors to the several sites of interest.

The Andrew Jackson Historical State Park and its unique "Block House Museum" with its excellent period exhibits is attracting interested visitors in ever increasing numbers.

Of unusual interest is the generous gift of a greater than life size bronze statue of Andrew Jackson the Youth on horse by the famous 90-year old sculptress Anna Hyatt Huntington. The statue is to be set on a 25-ton native granite base designed by local architect Joseph Croxton.



Trouble plagued even the memory of Andrew Jackson as the 25 ton base for his statue crumpled the crane straining to lift it to its foundation.

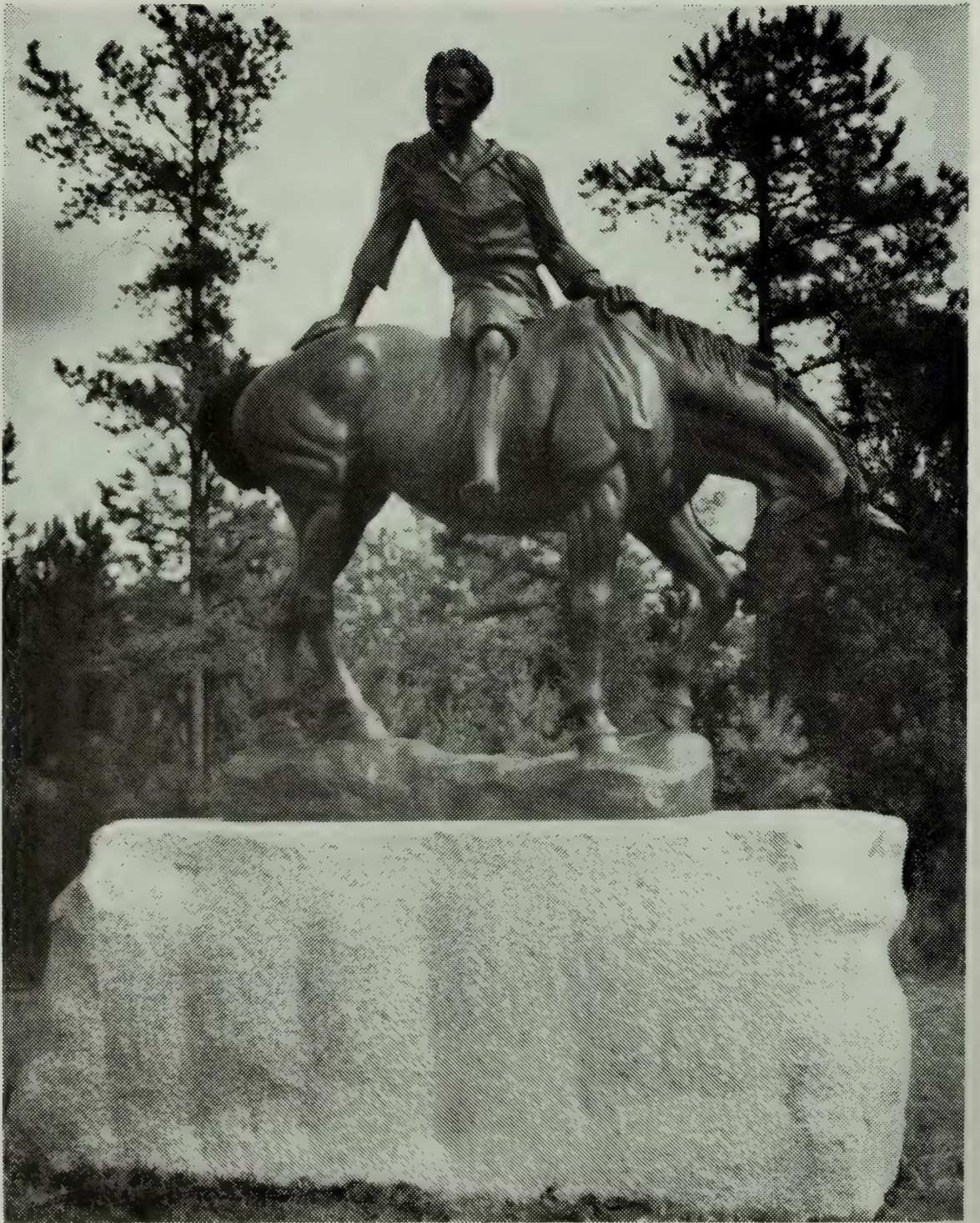
Dedication of the statue is planned for March 15, 1967 the 200th birthday anniversary of the 7th President—a native of South Carolina.

State Historical Sites

State Historical Sites are areas of historical significance that have been acquired by the state and turned over to the Division of State Parks for administration and maintenance. The five sites so assigned are as follows:

Eutaw Springs Battleground Site on the shore of Lake Marion near Eutawville in Orangeburg County. Markers tell of the last important battle of the Revolution in South Carolina.

Fort Watson Battle Site and Indian Mound on the shore of Lake Marion in Clarendon County is located one mile west of U. S. Highways 301 and 15, one mile north of the causeway over Lake Marion. A marker tells the story of the Revolutionary War fort built upon the Indian mound and its spectacular capture from the British.



General Francis Marion Burial Site near Pineville, in Berkeley County, one mile north of S. C. Highway 45. The grave of the "Swamp Fox" is in the family burial plot of his brother, Gabriel Marion on Belle Isle Plantation.

General Thomas Sumter Burial Site is located in the family burial plot in what was the garden of his Home House Plantation near Stateburg in Sumter County. Of interest is the quaint little "Chapel of Ease" over the grave of the General's daughter-in-law, Nathalie deLage Sumter, a French countess.

Colonel Isaac Hayne Burial Site is located one mile north of S. C. Highway 64 between Jacksonboro and Walterboro, a short distance out of Jacksonboro. His grave is in the family burial plot, in what was the garden of the Hayne antebellum home, Hayne Hall.

By reason of the areas not having a resident supervisor estimated visitor figures are not available.

THE BOY OF THE WAXHAWS BY ANNA HYATT HUNTINGTON

THIS STATUE OF THE YOUNG ANDREW JACKSON IS A GIFT TO THE CHILDREN OF SOUTH CAROLINA BY THE SCULPTOR, ANNA HYATT HUNTINGTON. CHILDREN OF THE ELEMENTARY SCHOOLS THROUGHOUT THE STATE CONTRIBUTED THEIR NICKELS AND DIMES FOR THE BASE.

"WE, THE CHILDREN OF LANCASTER COUNTY, SOUTH CAROLINA, ARE INTERESTED IN A YOUTHFUL STATUE OF ANDREW JACKSON BECAUSE HE WAS BORN AMONG THE RED CLAY HILLS OF OUR COUNTY AND HERE HE SPENT THE FORMATIVE YEARS OF HIS LIFE, HIS FIRST SEVENTEEN, RIDING HORSEBACK, WRESTLING, COCK-FIGHTING, AND GAINING THE BEST EDUCATION THE FRONTIER HAD TO OFFER: INSTRUCTIONS FROM THE PRESBYTERIAN MINISTER AT THE WAXHAW MEETING HOUSE."

SIXTH GRADE, H. R. RICE ELEMENTARY SCHOOL
NANCY CROCKETT, TEACHER AND PRINCIPAL

"A PICTURE CAME TO MIND AS I READ OVER YOUR LETTER AND I HAVE TRIED OUT THE COMPOSITION. I HAVE JACKSON AS A YOUNG MAN OF SIXTEEN OR SEVENTEEN, SEATED BAREBACK ON A FARM HORSE, ONE HAND LEANING BACK ON THE HORSE'S RUMP AND LOOKING OVER HIS NATIVE HILLS, TO WONDER WHAT THE FUTURE HOLDS FOR HIM."

"IT HAS BEEN A PLEASURE FOR ME TO WORK ON SOUTH CAROLINA'S GREAT MAN AND TO TRY TO VISUALIZE HIM AS A MATURING YOUTH LOOKING INTO THE FUTURE."

ANNA HYATT HUNTINGTON

LANCASTER COUNTY HISTORICAL COMMISSION
SOUTH CAROLINA STATE COMMISSION OF FORESTRY

S. C. STATE COMMISSION OF FORESTRY
DIVISION OF STATE PARKS
SUMMARY OF STATE PARK USE—JULY 1, 1965-JUNE 30, 1966

NAME OF PARK	Museum Visitor Days	Community Building User Days	Cabin Use Days	Group Camper Days	Family Camper Days	Other Camper Days	Boater Days	Fishermen Days	Picnicker Days	Swimmer Days	Total Vehicles	Out-of-State Visitors	Total Visitor Days
Aiken	3,008	.....	.....	.....	717	450	1,145	1,667	8,483	.....	5,442	2,000	22,005
Andrew Jackson	2,480	.....	6,859	6,848	19,217
Barnwell	3,515	.....	21	320	400	.....	.....	9,866	.....	5,830	318	26,545
Cheraw	1,780	.....	4,319	2,889	488	1,136	3,922	9,294	4,319	12,438	8,708	49,379
Campbell Lake	108	1,024	1,273	.....	1,128	760	4,414
Chester	495	.....	.....	65	8,867	.....	7,696	776	30,320
Croft	650	.....	600	1,500	.....	725	75	3,500
Edisto
Givhans Ferry	1,288	.....	.....	1,781	.....	.....	5,250	6,104	.....	6,476	2,295	26,669
Greenwood	9,629	251	7,093	.....	21,549	.....	30,117	3,285	132,992
Hunting Island	16,751	.....	.....	8,750	34,785	82,095	87,325	15,790	348,220
Huntington Beach	7,592	7,563	.....	32,108	24,074	158,800
Kings Mountain	16,459	10,095	1,818	.....	874	18,250	.....	13,419	24,365	56,334
Lee	1,770	.....	.....	668	1,164	.....	2,454	1,834	.....	4,450	855	14,271
Little Pee Dee	4,200	.....	100	.....	1,608	7,694	.....	7,473	5,360	19,699
Myrtle Beach	16,847	14,989	.....	84,700	117,305	338,208
Oconee	1,352	96	1,075	215	7,370	.....	4,618	887	16,061
Old Dorchester	5,324	1,520	20,753
Paris Mountain	1,592	1,276	208	1,419	604	52,446	.....	37,106	3,782	135,868
Pleasant Ridge	49	.....	242	111	3,248	.....	1,659	596	6,591
Poinsett	4,254	200	.....	3,140	1,395	838	1,416	657	6,895	.....	7,063	2,700	28,380
Mill Creek	700	.....	1,204	.....	.....	.....	70	260	.....	1,513	73	6,275

Rivers Bridge	1,878	1,588	.....	.....	1,440	11	.....	443	2,117	.....	3,542	2,505	12,652
Rose Hill	2,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	700	350	2,400
.....	.....	.....	.....	.....	.....	.....	.....	6,239	.....	.....	7,824	9,757	32,160
Santee .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sesquicentennial .....	.....	.....	.....	.....	.....	.....	114	199	29,010	.....	22,107	14,279	85,500
Table Rock .....	.....	.....	.....	.....	.....	.....	2,885	781	36,367	.....	17,113	6,318	66,880
Colleton Wayside .....	.....	.....	.....	.....	.....	.....	.....	.....	5,574	.....	2,890	5,828	8,950
TOTALS	11,540	10,841	.....	30,935	61,394	8,119	16,633	59,972	297,812	86,414	417,645	261,409	1,673,143

ANNUAL STATE PARK USE—1936-37 to 1965-66

1936-37	227,280
1937-38	478,617
1938-39	494,850
1939-40	584,150
1940-41	830,156
1941-42	1,053,057
1942-43	531,415
1943-44	546,165
1944-45	545,906
1945-46	808,207
1946-47	1,242,633
1947-48	1,562,260
1948-49	1,383,779
1949-50	2,089,712
1950-51	2,578,259
1951-52	3,378,091
1952-53	3,130,694
1953-54	3,207,094
1954-55	3,066,971
1955-56	2,893,996
1956-57	3,248,891
1957-58	3,069,393
1958-59	3,067,679
1959-60	3,181,189
1960-61	3,324,276
1961-62	3,186,416
1962-63	3,306,501
1963-64*	1,846,016*
1964-65	1,432,139
1965-66	1,673,143
TOTAL	57,968,935

*Parks were closed September 8, 1963. Parks were reopened June 1, 1964 on a limited basis by Legislative Act.

Information and Education

INTRODUCTION

South Carolina's 12 million acres of forest land provide an annual return of more than half a billion dollars in growing, harvesting, manufacturing, transporting and sale of forest products.

The needs of our ever increasing population demand that each forest acre produce the maximum amount of usable wood, protect soil and water supplies, and provide for the recreational needs of the citizens of the state.

Every Forestry Commission employee participates in the educational program designed to reach every South Carolinian. Through various means citizens are made aware of their responsibilities to conserve our natural resources so that present and future generations may use and enjoy them to their fullest.

Supporting the state's third largest industry, our forests provide a livelihood for thousands of people. Yet the state's woodlands are producing less than half of their potential. The aim of the Commission's educational program is to help the landowners and people of the state realize the potential value of our woodland and apply the necessary conservation practices that can double the timber production.

Points stressed in the Commission's information and education efforts in promoting wise land use are:

1. Forest fire protection: Some 5,467 (only 32 caused by lightning) illegal woods fires burned during the year in South Carolina, with 99% being caused by people.

2. Unwise cutting practices mean low production and inferior forest products.

3. Trees should be planted on some five million acres of idle or unproductive land.

4. Improve the quality of many existing stands of timber throughout the state by removing inferior species and low grade and poor-quality trees.

5. Develop appreciation in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of the state.



EACH DAY AND MONTH OF 1966 MATCHES 1910 EXACTLY

JANUARY, 1910

**SOUTH CAROLINA
STATE COMMISSION OF FORESTRY**

County rangers and wardens distribute wall calendars and pocket calendars as part of the Commission's continuing forest fire prevention efforts.

FOREST FIRE PREVENTION

In the Commission's 1929 Annual Report, Lewis E. Staley, then State Forester, said, "While light burning may not kill the larger trees, unquestionably the basis for future forests—the baby trees—are practically all destroyed. This is an indisputable fact." To this day, it is upon this "indisputable fact," *that even little fires kill little trees*, that the primary approach of the Commission to forest fire prevention is based. Through a program beginning with personal contacts the need for preventing wild-fires is brought to the attention of every man, woman and child in the state. Commission personnel also utilize other media of communication such as posters, pocket and wall calendars, roadside signs, exhibits, publications, illustrated talks, newspaper articles and radio and television programs to bring the conservation message to each citizen of the state.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The Cooperative Forest Fire Prevention Campaign supplements local materials and programs with those produced in cooperation with the federal government and other states. It reinforces local efforts to reach, in one way or another, every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, Inc., in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services to prepare materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, bookmarks, newspaper ads, radio platters, TV films, and other materials to bring forest fire prevention information and reminders to men, women, and children.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message, provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear ash trays, wallets, moccasins, T-shirts, scarfs, fishing tackle, archery sets, cigarette snuffers, belts, figurines, salt and pepper shakers,



**Every tree
is a family tree.
So please
help Smokey...**



**ONLY YOU CAN PREVENT
FOREST FIRES!**

U.S. Department of Agriculture—Forest Service

66-CFFP-9

State Forestry Department

U.S. GOVERNMENT PRINTING OFFICE: 1965 O-358-780

Working with the national Cooperative Forest Fire Prevention Campaign, Commission personnel throughout the state are actively distributing posters, bookmarks, booklets, stuffers and many other items produced under the guidance of The Advertising Council, Inc.

handkerchiefs, coloring books, comic books, story books, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls and other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Recognizing the need for a more southern slant than the national campaign can provide, the states and the U. S. Forest Service in the South have continued to cooperate in the production of forest fire prevention materials with a southern flavor. The seventh year's operation of the southern program saw continued production of recorded radio spots, a series of TV spots, news ads, and stuffers, all of which are currently being distributed. The southern materials supplement the national materials to intensify and strengthen forest fire prevention efforts in South Carolina.

SCHOOL PROGRAMS

School children throughout the state received basic information on forestry and forest fire prevention from Forestry Commission foresters, rangers, and wardens. Some 1,159 programs were held in the fifth and sixth grades, where schoolyard demonstrations of fire control equipment and suppression techniques, flip charts and color slides were used to help bring the conservation story to the classroom. In these two grades alone, 51,097 school children were given basic information concerning the conservation of our forest resources. Similar demonstrations and slide programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations, all third grade children throughout the state (68,300) received a copy of the booklet "Smokey Bear's Story of the Forest". An equal number of second grade students received coloring sheets with forest fire prevention and conservation messages. Over 64,000 fourth graders received a booklet "The True Story of Smokey Bear".

Through the cooperation of the Southern Pulpwood Conservation Association 60,000 copies of a 16-page booklet entitled "Your Fabulous Friend" were made available to the Commission for distribution to sixth grade pupils. Member mills making this distribution possible were: Bowaters Carolina Corpora-

tion; Champion Papers Inc.; International Paper Company; Sonoco Products Company; Union Camp Corporation; and West Virginia Pulp and Paper Company.

Forestry movies were also shown in schools, bringing conservation information to students of all grade levels.

The Commission's school programs are designed to add to each child's understanding of the total stewardship of life, building toward a stronger and more appreciative community of the future. The programs give basic information to children on the value of woodlands and the care needed to make them produce and contribute to a prosperous future.

FORESTRY DEMONSTRATIONS

During the year 4,368 persons attended 98 demonstrations conducted by personnel of the Forestry Commission. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species, and timber stand improvement.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson University Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies, and organizations cooperated to make the observance of 1965 Arbor Day and Conservation Week a success. South Carolina Law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 50,000 copies of a special folder were printed and distributed to schools and other interested groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Forestry Commission personnel gave numerous talks at meetings held during Conservation Week. Many of the programs included tree planting exercises. Incomplete records show 341 Conservation Week and Arbor Day programs were presented to 41,599 children and adults.



4-H Club members are shown (above) how to use hand tools to suppress a fire and (below) how to prepare non-productive forest land for planting to trees.

FIRE PREVENTION ROADSIDE SIGNS

Roadside signs continued to carry three messages in the following sequence: **USE YOUR ASH TRAY — HELP PREVENT WOODS FIRES — PROTECT LITTLE TREES, KEEP SOUTH CAROLINA GREEN.** First erected in February 1953, the fire prevention roadside signs appear on highways throughout the state. The Commission purchases additional signs each year and replaces worn out and damaged signs so thousands of motorists will continue to see these forest fire prevention reminders.

MOTION PICTURES

Motion pictures are valuable aids in teaching conservation, and films are often used to supplement talks. Each district office has motion picture equipment which is used for forestry motion picture showings in every county in the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school and church groups, civic clubs, community organizations, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 38,772 people saw motion pictures on forestry at 491 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

In 1930 forestry was added as a course of study in vocational agriculture classes in South Carolina. Each year the Agricultural Education staff of the State Department of Education and the State Commission of Forestry work together to teach vocational agriculture students the importance of forest conservation.

School forest laboratories serve as aids in teaching forestry. They are "outdoor classrooms" where young men learn to do by doing. The students construct firebreaks to protect their laboratory from fire. They learn to plant trees, eliminate weed trees, select, measure, and estimate merchantable volumes in trees which are to be harvested. Timber in need of cutting is sold under contract as the students learn to market forest products. The laboratory is divided into a number of small plots to be worked once a year. One plot is left untreated to compare with plots where good forestry practices are carried out.

In the annual Chapter Forestry Contest sponsored by the Forestry Commission, in cooperation with the State Department of Education, the following FFA Chapters were awarded \$60 and an engraved plaque for outstanding forestry work.

DISTRICT I — Pendleton
 DISTRICT II — Fort Mill
 DISTRICT III — W. E. Parker
 DISTRICT IV — Bells
 DISTRICT V — St. John's
 DISTRICT VI — Conway

New Farmers of America chapters were brought into the Future Farmers of America organization during the year. For this reason no NFA awards were given.

RESOURCE-USE EDUCATION

Resource-use education continues to stimulate interest in the out-of-doors as an aid to effective teaching, as well as a means of instilling conservation concepts.

State park nature trails served effectively as "outdoor classrooms" as forestry and state park personnel worked with many school groups and others in carrying out projects and instruction in the field of conservation.

The State Forestry Commission maintains active membership in the South Carolina Advisory Council on Conservation Education. A proposal by this organization for the production of teacher's guides on conservation was approved and funds were provided by the Belle W. Baruch Foundation during the year. Commission personnel attended orientation sessions before the writing began. The "Conservation Curriculum Improvement Project" writing session began on June 20 and lasted through July 9. The Forestry Commission furnished material, information and technical assistance to the writing teams made up of outstanding teachers representing various grade levels in schools throughout the state.

The lessons developed by the teachers will be used during the 1966-67 school year by selected teachers who will evaluate them and offer additions, suggestions and criticisms. These will be considered and incorporated before the teacher's guides are given wider distribution.

Since this is the first project of its type in the country, distribution throughout the United States is expected.

TALKS

State Commission of Forestry personnel give talks about forestry and state parks before many groups. The use of color slides with many of the talks helps make them more interesting and more effective.

During the year a total of 241 talks were made by Commission personnel to 8,871 people. Civic clubs, church groups, school groups, and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. Important points of contact between personnel of the Commission and the public are the 138 fire towers where persons visiting saw the work of detecting, reporting, dispatching, fighting and preventing fires explained or demonstrated.



The question "What's in a Tree" is posed while a talking Smokey gives the ABC's of forest fire prevention at the 1965 State Fair.

EXHIBITS

Exhibits provide an excellent means of placing forestry and state park information before the people.

More than 1,060,025 people saw forestry and state park exhibits and displays in fairs, parades, and special meetings as follows:

EXHIBITS AT STATE AND COUNTY FAIRS

Location of Exhibit- County Fair	Type of Exhibit	Est. Attend.
Abbeville	Judge Smokey Diorama	12,500
Chesterfield	"It's The Law"	5,000
Anderson	Judge Smokey Diorama	70,000
McCormick	Judge Smokey Diorama	4,000
Sumter	Smokey's Commandments	21,000
Camden	"It's The Law"	4,500
Union	"There's Power In The Forest"	35,000
Greenville	Commercial Woods of S. C. and Talking Smokey	25,000
Greenwood	Commercial Woods of S. C.	50,000
Florence	Ranger's Pickup	85,000
Chester	"It's The Law"	4,000
Moncks Corner	"It's A Wise Man Who Looks Ahead"	5,000
Newberry-Saluda	Co. Ranger's Pickup and Equipment	31,000
Spartanburg	Talking Smokey and Ranger's Pickup	85,000
Laurens	Commercial Woods of S. C.	22,500
Bishopville	Smokey's Commandments	5,000
Marion	Management Diorama	11,000
Lancaster	Talking Smokey	12,000
Rock Hill	"There's Power In The Forest"	15,000
Beaufort	Talking Smokey	5,000
Hampton	Talking Smokey	7,000
Walterboro	Talking Smokey	7,000
Chester	Management Diorama	3,000
Chester (N)	Management Diorama	1,500
TOTAL—County Fair Exhibits		526,000

State Fairs

Columbia	Talking Smokey and "What's In A Tree?"	150,000
Palmetto State	Talking Smokey and "What's In A Tree?"	90,000
TOTAL—State Fair Exhibits		240,000
TOTAL—Fair Exhibits		766,000

Exhibits, Floats and Displays for Special Events

(Other than County or State Fairs)

Dillon (Christmas Parade) Smokey Float	10,000
Latta (Christmas Parade) Smokey Float	5,000
Lake View (Christmas Parade) Smokey Float	4,000
Florence (Fire Prevention Parade) Fire Fighting Equipment	8,000
Aynor (Christmas Parade) Smokey Float	4,000
Loris (Christmas Parade) Smokey Float	5,000
Conway (Christmas Parade) Smokey Float	8,500
Bennettsville (Christmas Parade) Smokey Float	6,000
McColl (Christmas Parade) Smokey Float.....	1,500
Columbia (Fire Prevention Parade) Ranger's Pickup with Smokey	40,000
Shaw Air Force Base (Fire Prevention Parade) Smokey on Pickup	8,000
Camden (Garden Club Exhibit) Talking Smokey	400
Kershaw (Garden Club Exhibit) Talking Smokey	250
Newberry (Christmas Parade) Fire Control	25,000
Newberry (Clean-up Week Parade) Fire Control	6,000
Aiken (Fire Prevention Parade) Fire Control Equipment	4,000
Bamberg (Flower Show Exhibit) Woods of South Carolina	175
Denmark (Flower Show Exhibit) Woods of South Carolina	200
Gilbert (Peach Festival) Smokey Bear and Equipment	5,000
Oconee (Apple Festival) Fire Control	15,000
Charleston (Christmas Parade) Smokey Bear	30,000
North Charleston (Christmas Parade) Smokey Bear	25,000
West Ashley (Christmas Parade) Smokey Bear	30,000
Mt. Pleasant (Christmas Parade) Smokey Bear	25,000
Walterboro (Christmas Parade) Smokey Bear	3,500
St. George (Christmas Parade) Smokey Bear	3,000
Hampton (Christmas Parade) Smokey Bear	3,000
Hampton (Watermelon Parade) Smokey Bear	15,000
Ridgeland (Christmas Parade) Smokey Bear	3,500
Total Floats and Displays	294,025
GRAND TOTAL, Exhibits, Floats, Displays	1,060,025

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperate generously with the Forestry Commission by providing air time for many programs on forest fire prevention, forest management and other phases of forestry, and on educational, historical, and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that at least 570 live or taped radio and TV programs on state parks and forestry were presented during the year. This number does not include the hundreds of recorded programs and film spots carried by radio and television stations, using material made available through the National and Southern Cooperative Forest Fire Prevention Campaigns, and spot announcement material prepared by the Forestry Commission for special use during periods of high fire danger.

COOPERATION WITH OTHER ORGANIZATIONS

The Forestry Commission furnished forest tree seedlings to Kiwanis Clubs throughout the state to publicize tree planting. Forestry Commission foresters presented talks at regular meetings of many Kiwanis Clubs in connection with giving each Kiwanian a tree seedling to plant. This project helped spotlight the need and the opportunities for tree planting in South Carolina.

NEWS RELEASES AND ARTICLES

Newspapers provided excellent coverage, placing forestry and state park news before the people regularly.

During the year Commission personnel prepared 743 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, such as during serious fire situations, news items are given orally to individual papers and to the wire services. Many stories are written by newspaper editors and reporters.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

FOREST FIRE EMERGENCY

An unusual March created a forest fire story in South Carolina that broke through to every news media available. It gave national and international front page publicity to an emergency that was a near disaster for this state.

March of 1966 was the driest in ten years, with no rain at all after March 4. Constant winds blew from 8 to 20 miles per hour for more than three weeks while the relative humidity dipped to 20 and 30 per cent during the day and rose no higher than 45 to 50 during the night. A humidity low of 16% on Sunday, April 3, created a condition like "Death Valley" where the smallest spark can "explode" into an uncontrollable fire. For the 16-day period ending April 3, 1,750 wildfires burned 90,000 acres of woodland. The three-day period, April 1-3, proved the costliest with 480 fires scorching 65,000 acres of South Carolina forest land.

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The State

South Carolina's Largest Newspaper

Monday, March 21, 1966

2 Sections — 24 Pages

Daily 10c; Sunday 20c

Inside

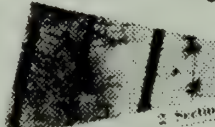
Agriculture	4-1	Theatre	6-8
Comics	5-8	TV-Radio	12-14
Deaths	5-A, 1-15	World Ads	4-11-12
Editorials	16-17	Weather	2-3
Sports	2-12	Women	4-5

Fires Continue To Sweep S.C.

30,000 Acres Lost In Critical Blaze

By SAM F. MUELEN
Staff Writer

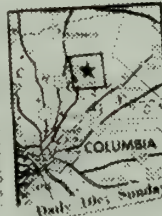
WINDS OF 20 TO 30 M.P.H. FROM THE SOUTH AND WEST ARE Fanning the flames of a fire that has burned for 24 hours in the heart of the South Carolina pine forests. The fire, which started on Sunday night, has spread to 30,000 acres and is now burning in a critical area near the town of Columbia.



S.C. Timberland Ravaged By Fire

Placed pictures 4-8
RE MAX FORD
Staff Writer

AN AREA OF 30,000 ACRES OF PINE TIMBERLAND IN THE SOUTH CAROLINA FORESTS IS NOW BEING RAVAGED BY A FIRE THAT STARTED ON SUNDAY NIGHT.



THE FIRE STARTED ON SUNDAY NIGHT IN THE HEART OF THE SOUTH CAROLINA PINE FORESTS. IT HAS SPREAD TO 30,000 ACRES AND IS NOW BURNING IN A CRITICAL AREA NEAR THE TOWN OF COLUMBIA.

NO HOMES IN THE AREA WERE REPORTED DESTROYED BY THE FIRE. BUT AT SEVERAL PLACES THE FLAMES COULDED NOT BACK SPACES AND THE COLUMBIA COUNTY CHURCH, WHICH WAS BUILT IN A 1960 YARD, WAS BURNED DOWN FROM A DRYED PINE, WHICH COULD NOT BE SAVED.

BUT THE FIRE IS NOT THE ONLY ONE IN THE AREA. OTHER FIRES ARE BURNING IN THE SOUTH CAROLINA FORESTS. THE FIRE IN THE SOUTH CAROLINA FORESTS IS NOW BEING RAVAGED BY A FIRE THAT STARTED ON SUNDAY NIGHT.

Winds, Tinderbox Dryness Spur Forest Fires In S.C.

Gaston: Almost All Alone

RE MAX FORD
Staff Writer

GASTON, S.C., (AP) — A FIRE THAT STARTED ON SUNDAY NIGHT IN THE HEART OF THE SOUTH CAROLINA PINE FORESTS IS NOW BEING RAVAGED BY A FIRE THAT STARTED ON SUNDAY NIGHT.

Fire To Be Critical; No One Injured; Let-Up Seen Today

No One Injured In Blazes

MAX FORD
Staff Writer

THE FIRE IN THE SOUTH CAROLINA FORESTS IS NOW BEING RAVAGED BY A FIRE THAT STARTED ON SUNDAY NIGHT.

NO HOMES IN THE AREA WERE REPORTED DESTROYED BY THE FIRE. BUT AT SEVERAL PLACES THE FLAMES COULDED NOT BACK SPACES AND THE COLUMBIA COUNTY CHURCH, WHICH WAS BUILT IN A 1960 YARD, WAS BURNED DOWN FROM A DRYED PINE, WHICH COULD NOT BE SAVED.

STAR AND STRIPES

Vol. 22, No. 93 AIR EDITION Monday, April 4, 1966

Forest Fires Peril 3 S. Carolina Counties

THE PRESS, RADIO AND TELEVISION GAVE EXCELLENT NEWS COVERAGE TO THE CRITICAL FOREST FIRE SITUATION OCCURRING IN MARCH AND APRIL OF 1966.

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The press, radio and television gave excellent news coverage to the critical forest fire situation occurring in March and April of 1966.

The loss in this 3-day period was twice the annual average for the past five years and nearly four times the loss experienced during the previous year. The total fire loss this fiscal year of 5,467 wildfires burning 127,805 acres of woodland was greater than any loss since 1954-55 when 7,022 wildfires burned 158,786 acres of woodland.

Forty-one homes were lost in these fires and an uncounted number of sheds, barns and outbuildings. Hundreds more were threatened during this critical period. Miracle of miracles, no lives were lost as a direct result from fire.

During the fire emergency all state parks were closed to public use. On March 31, Governor Robert McNair, as authorized by an Act of the State Legislature in 1955, issued, for the first time, a proclamation prohibiting the use of fire in or adjacent to woodlands of South Carolina.

Late April 3rd and early April 4th rains over the state ended the extremely critical siege of fire-weather and prevented what could have been a major disaster should the prevailing weather conditions have continued.

Excellent cooperation and coverage by newspapers, radio and television stations and others was experienced throughout the fire emergency.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications in carrying out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Among the items printed during the year was a series of four pocket size cards. These were produced for use as personal contact tools in twelve counties designated as "hot counties". These cards entitled "Burn Your Brush and Trash Safely", "Forest Fires, Laws and You!", "Protect Your Woodlands From Wild-fire", and "Help Your Forest Grow", have statewide application and were distributed for use in every county.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of

Agriculture, Clemson University Extension Service, American Forest Products Industries, Inc., various forest industry companies and associations, and other organizations, groups, and agencies which publish material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park installations of the Forestry Commission. Exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owners and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given

a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices. Tree Farms are also effective places to hold demonstrations on various phases of forestry.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, the state representative of American Forest Products Industries, Inc., the national sponsor, with the cooperation of the S. C. State Commission of Forestry, the Clemson University Extension Service, and consulting foresters and woodland owners in South Carolina. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program.

As of June 30, 1966, there were 678 Tree Farms in the state, comprising 2,166,263 acres.

APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1965-June 30, 1966

RECEIPTS

Division of Forestry:

Balance from 1964-65, Forestry Commission—Specials	\$ 25,544.57	
State Appropriation—Operating	2,042,671.00	
State Appropriation—Operating, Salary Adjustment	40,169.00	
State Appropriation—Wildlife Management, Manchester Forest..	6,100.00	
State Appropriation—For Purchase of Suppression Units	45,600.00	
Forestry Commission—Specials, CM Law, Sec. 2	420,680.00	
Forestry Commission—Specials, CM Law, Sec. 4	3,000.00	
Forestry Commission—Specials, Coop. Forest Management	75,980.42	
Forestry Commission—Specials, Soil Bank Title IV Program ..	46,670.23	
Forestry Commission—Specials, A.S.C.S.	12,916.29	
Forestry Commission—Specials, Watersheds	26,169.77	
Forestry Commission—Specials, Appalachia Program	3,172.56	
Departmental Revenue: State Forests, S.O.E.P.	345,557.54	
Departmental Revenue: State Parks Forest Demonstration Area	62,983.17	
Firebreak Plowing	4,569.00	
Miscellaneous (Radio Coop. Funds)	6,602.30	
Miscellaneous (Tractor Operator Salary)	6,618.73	
Nurseries	199,358.40	
Timber Marking	11,043.43	
Miscellaneous	20.58	
Total Receipts—Forestry		\$3,385,426.99
Less Receipts Deposited to Credit of State Revenue Account		264,266.04
Total Receipts Available for Expenditures		\$3,121,160.95
Total Expenditures		3,042,401.31
Balance—Division of Forestry		\$ 78,759.64*

Division of State Parks:

Balance from 1964-65, Forests and Parks Fund	\$ 9,628.91	
Balance from 1964-65, Parks Improvements	9,588.96	
Balance from 1964-65, Myrtle Beach Fishing Pier	3,535.09	
Balance from 1964-65, Myrtle Beach Swimming Pool	1,464.34	
Balance from 1964-65, Myrtle Beach Pier, Park, etc.	65,012.53	
Balance from 1964-65, Huntington Beach—Special	9,998.98	
Balance from 1964-65, Chester State Park—Special	23,842.85	
State Appropriation—Operating	366,089.00	
State Appropriation—Andrew Jackson Monument	2,500.00	
State Appropriation—Historical Areas	19,669.00	
Forests & Parks Fund—Hunting Island Deposits	2,753.50	
Forests & Parks Fund—Santee Boat Landing	1,199.49	
Deficiency Appropriation—State Parks Permanent Improvements	256,000.00	
Myrtle Beach Fishing Pier	42,153.06	
Cabin Rentals	300.00	
Refreshment Stands & Concessions	14.76	
Picnic Tables	3,625.19	
Boat Rentals	3,210.35	
Picnic Shelter Fees	2,848.50	
Recreation Building Rent	848.00	
Group Camps	10,019.12	
Day Camp & Trailer Fees	11,188.86	
Miscellaneous (Sales Tax)	344.70	
Total Receipts—Parks		\$ 845,835.19
Less Receipts Deposited to Credit of State Revenue Account		32,399.48
Total Receipts Available for Expenditures		\$ 813,435.71
Total Expenditures		470,499.31
Balance—Division of State Parks		\$ 342,936.40†

EXPENDITURES

Administrative & Technical	\$ 778,322.65	
State Forestry—Nurseries	242,731.80	
State Forests	253,003.65	
Fire Control	1,560,247.83	
25% Payment to Counties (4)—S.O.E.P.	85,378.26	
Bureau of Sport Fisheries & Wildlife—SHSF	27,531.33	
Forestry Center Loan Retirement	79,440.00	
25% Payment to Counties (6)—S.P.F.D.A.	15,745.79	
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Total—Forestry	\$3,042,401.31	
Total—Parks	470,499.31	
	<hr/>	
GRAND TOTAL—Expenditures		\$3,512,900.62

RECAPITULATION

Funds Available:

Division of Forestry	\$3,121,160.95	
Division of State Parks	813,435.71	
	<hr/>	
		\$3,934,596.66

Expenditures:

Division of Forestry	\$3,042,401.31	
Division of State Parks	470,499.31	
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		\$3,512,900.62

Balance		\$ 421,696.04†*
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Balances:

*Forestry: Forestry Commission—Specials	\$ 33,159.64	
Deficiency Appropriation—Suppression Units	45,600.00	
†Parks: Forests & Parks Fund	13,245.44	
Parks Improvements	3,890.92	
Deficiency Appropriation—Parks Improvements	247,150.00	
Damage to Myrtle Beach Pier & Park, etc.	62,469.47	
Myrtle Beach Fishing Pier	14,716.23	
Myrtle Beach Swimming Pool	1,464.34	
	<hr/>	
Balances Carried Forward		\$ 421,696.04

TABLE 1—PROTECTION PERSONNEL
FISCAL YEAR 1965-66

UNIT	ORGANIZED PERSONNEL					Volunteer Personnel	GRAND TOTAL
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	234	239
Aiken	1	4	2	5	12	521	533
Allendale	1	2	1	3	7	102	109
Anderson	1	2	1	3	7	226	233
Bamberg	1	2	1	2	6	384	390
Barnwell	1	2	2	2	7	361	368
Beaufort	1	3	2	4	10	50	60
Berkeley	1	4	2	4	11	857	868
Calhoun	1	2	1	2	6	558	564
Charleston	1	4	3	3	11	220	231
Cherokee	1	1	1	1	4	249	253
Chester	1	3	1	1	6	326	332
Chesterfield	1	3	1	4	9	321	330
Clarendon	1	3	2	3	9	446	455
Colleton	1	4	3	5	13	490	503
Darlington	1	2	..	3	6	852	858
Dillon	1	2	1	2	6	521	527
Dorchester	1	4	2	3	10	237	247
Edgefield	1	2	1	1	5	249	254
Fairfield	1	4	1	3	9	370	379
Florence	1	4	2	4	11	799	810
Georgetown	1	4	2	4	11	654	665
Greenville	1	3	1	4	9	871	880
Greenwood	1	2	1	2	6	370	376
Hampton	1	3	1	3	8	276	284
Horry	1	5	3	4	13	618	631
Jasper	1	3	2	2	8	415	423
Kershaw	1	3	3	6	13	765	778
Lancaster	1	3	1	2	7	585	592
Laurens	1	3	1	2	7	362	369
Lee	1	2	1	3	7	283	290
Lexington	1	3	2	5	11	1,091	1,102
Marion	1	3	2	3	9	489	498
Marlboro	1	3	2	3	9	376	385
McCormick	1	1	1	1	4	144	148
Newberry	1	2	1	2	6	228	234
Oconee	1	2	1	3	7	385	392
Orangeburg	1	5	3	5	14	773	787
Pickens	1	3	1	4	9	302	311
Richland	1	5	2	4	12	868	880
Saluda	1	2	1	1	5	151	156
Spartanburg	1	3	1	4	9	858	867
Sumter	1	3	2	3	9	785	794
Union	1	2	1	1	5	377	382
Williamsburg	1	5	2	4	12	1,030	1,042
York	1	2	1	4	8	743	751
TOTALS	46	134	70	138	388	22,172	22,560

TABLE 2—SUMMARY OF FIRES BY MONTHS

July 1, 1965–June 30, 1966

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Avg. Area Per Fire (Acres)
July	36	0.7	76.9	2.1
August	53	1.0	222.8	4.2
September	35	0.6	126.2	3.6
October	157	2.9	433.6	2.8
November	426	8.0	3,093.5	7.1
December	1,170	21.4	13,837.0	11.8
January	396	7.2	2,899.2	7.3
February	450	8.2	4,572.4	10.2
March	1,650	30.2	36,764.6	22.3
April	965	17.6	65,093.5	67.4
May	50	0.9	339.0	6.8
June	69	1.3	346.2	5.3
TOTALS	5,467	100.0	127,804.9	23.4

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1965-66

COUNTY	Lightning		Campfire		Smoking		Debris Burning		Incendiary		Machine Use		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	..	..	..	..	9	22.9	6	94.1	11	49.4	1	4.8	12	44.5	39	215.7
Aiken	..	2.8	3	4.6	43	980.2	35	6,160.7	9	37.8	4	27.6	25	260.8	121	7,474.5
Allendale	..	..	1	8.0	19	127.0	13	35.7	12	431.0	4	26.0	..	..	49	627.7
Anderson	..	..	..	..	25	98.7	22	75.4	14	115.9	..	..	9	41.7	70	331.7
Barnberg	..	..	..	..	21	112.1	19	566.9	12	798.3	5	284.6	9	72.5	66	1,834.4
Barnwell	3	10.0	3	9.6	31	353.8	27	783.5	30	95.8	1	5.0	5	38.9	100	1,296.6
Beaufort	..	..	1	60.0	14	180.3	16	196.3	14	221.5	1	65.0	2	34.0	48	757.1
Berkeley	..	..	..	..	48	729.0	65	2,940.1	183	11,656.6	1	1.0	4	38.0	301	15,364.7
Calhoun	1	0.4	2	150.0	22	967.9	3	3,009.0	..	..	1	4.5	1	0.2	30	4,132.0
Charleston	..	..	1	0.4	35	239.2	20	250.7	12	220.6	2	1.4	16	136.6	86	848.0
Cherokee	..	..	..	..	8	60.3	3	6.6	4	98.5	3	2.5	5	38.5	23	206.4
Chester	..	..	3	5.6	19	72.4	19	157.8	3	13.4	8	37.1	1	3.9	53	290.2
Chesterfield	2	109.0	6	9.5	8	23.5	9	53.5	18	3,120.7	12	207.2	17	213.2	72	3,736.6
Clarendon	..	..	1	2.0	30	665.8	97	935.4	136	2,694.0	2	40.5	3	1.6	269	4,339.3
Colleton	..	..	6	441.0	64	422.1	79	1,638.9	61	879.4	..	..	18	126.6	228	3,528.0
Darlington	2	121.0	..	..	47	567.5	47	222.8	18	133.4	9	841.8	30	300.5	153	2,187.0
Dillon	2	2.1	2	1.1	35	183.1	27	80.9	8	650.2	3	3.5	16	92.6	93	1,013.5
Dorchester	..	..	4	113.0	67	1,371.3	33	434.2	29	1,119.7	1	8.0	6	32.0	140	3,078.2
Edgefield	..	..	..	..	22	596.3	11	22.9	1	0.8	3	4.7	5	68.5	42	693.2
Fairfield	..	..	..	..	21	65.0	19	59.5	2	0.9	9	221.2	14	60.2	71	420.7
Florence	2	2.7	4	11.2	21	63.7	63	618.7	334	3,585.2	6	15.3	13	121.1	438	4,409.4
Georgetown	..	..	1	5.4	21	54.4	21	54.4	86	1,062.6	4	196.2	7	132.1	184	2,569.5
Greenville	..	..	2	1.1	48	618.8	37	558.7	86	987.8	4	7.6	4	86.7	144	3,116.5
Hampton	..	..	4	9.9	58	212.6	37	129.8	1	1.0	6	4.4	30	60.9	136	418.6
Greenwood	1	2.5	..	..	32	872.7	11	7.3	16	71.0	9	12.2	10	16.0	79	981.7
Horry	1	2.0	..	..	1	0.2	24	2,440.1	54	1,306.4	4	13.0	11	131.9	95	3,893.6
Jasper	1	0.1	5	29.0	57	277.4	78	1,433.7	116	889.5	1	625.0	35	178.6	293	3,433.3
Kershaw	1	4.8	7	27.6	20	640.6	46	1,361.4	54	987.8	4	7.6	12	86.7	144	3,116.5
Lancaster	2	141.2	5	19.0	20	855.8	30	606.4	28	10,027.1	13	44.0	19	103.1	117	11,796.6
Laurens	..	..	5	5.7	26	99.6	14	127.1	..	..	7	45.4	13	43.3	75	321.1
Lee	..	..	..	..	30	372.2	17	132.2	..	..	12	141.6	14	163.6	73	829.6
Lexington	..	..	2	26.0	28	443.2	32	199.9	6	20.5	..	..	7	42.7	75	732.3
Marion	3	7.0	3	1,510.3	22	4,607.9	23	83.8	13	81.0	17	2,096.7	25	532.4	106	8,918.5
Marlboro	..	..	1	2.0	28	193.1	19	197.0	31	113.4	3	2.4	11	10.4	93	518.3
McComick	3	265.0	3	9.1	33	347.6	38	408.2	29	200.9	8	290.3	23	5,891.6	137	7,412.7
McComick	1	1.0	..	..	7	56.8	6	93.7	3	5.2	6	28.9	2	12.7	25	198.3

Newberry	1	6.0	2	6.6	12	20.6	7	19.8	..	..	8.1	7	39.4	33	100.5
Oconee	..	....	1	0.2	18	118.7	11	21.5	7	23.5	2.4	11	37.0	50	203.3
Orangeburg	1	5.0	13	170.8	145	2,815.2	71	663.7	69	2,019.0	2.7	12	67.3	314	5,743.7
Pickens	..	....	2	8.0	14	83.6	23	87.7	4	129.4	17.6	20	47.8	67	374.1
Richland	..	....	7	203.0	46	232.3	48	207.5	66	478.9	3,302.5	35	105.3	217	4,529.5
Saluda	1	10.0	1	0.3	20	64.5	10	41.3	..	..	..	2	13.0	34	129.1
Spartanburg	..	....	..	....	27	205.9	19	355.2	2	12.0	808.0	32	1,375.5	91	2,756.6
Sumter	2	12.2	3	41.6	55	408.7	39	991.1	53	1,485.7	24.9	21	349.2	155	3,313.4
Union	..	....	..	....	25	179.4	9	223.8	..	..	12.0	2	1.2	39	416.4
Williamsburg	..	....	8	105.7	17	54.2	84	3,123.2	124	3,248.1	21.5	13	137.2	248	6,689.9
York	..	....	..	....	35	414.6	24	183.8	10	98.7	641.3	13	283.6	95	1,622.0
TOTALS	32	704.8	112	2,997.3	1,413	22,098.3	1,400	32,081.5	1,683	48,184.8	10,149.8	598	11,588.4	5,467	127,804.9

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS
Fiscal Year 1965-66

COUNTY	CLASS A		CLASS B		CLASS C		CLASS D		CLASS E		CLASS F		CLASS G		TOTAL	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Abbeville	5	0.6	31	85.9	3	129.2	..	..	..	..	..	..	..	..	39	215.7
Aiken	10	1.5	88	211.0	19	542.0	2	350.0	1	370.0	..	..	1	6,000.0	121	7,474.5
Allendale	2	0.4	38	165.8	7	226.5	2	235.0	..	..	..	..	..	..	49	627.7
Anderson	4	0.6	59	167.1	7	164.0	..	..	..	..	..	..	..	..	70	331.7
Bamberg	6	1.1	44	169.1	12	314.2	3	685.0	1	725.0	..	..	..	..	66	1,834.4
Barnwell	6	1.0	76	283.8	16	371.8	1	290.0	1	350.0	..	..	..	..	100	1,296.6
Beaufort	..	..	32	116.1	16	641.0	..	..	..	..	..	..	..	..	48	757.1
Berkeley	7	1.1	188	791.6	93	3,061.0	7	1,375.0	4	2,432.0	1	2,624.0	1	5,080.0	301	15,364.7
Calhoun	4	0.6	21	61.4	2	62.0	1	108.0	1	900.0	1	3,000.0	..	..	30	4,132.0
Charleston	3	0.4	59	292.5	24	646.0	..	..	..	..	..	..	..	..	86	848.9
Cherokee	3	0.3	14	30.1	6	176.0	..	..	..	..	..	..	..	..	23	296.4
Chester	3	0.4	43	134.6	7	155.2	..	..	..	..	..	..	..	..	53	290.2
Chesterfield	6	0.6	47	129.0	12	437.0	5	765.0	..	..	2	2,405.0	..	..	72	3,736.6
Clarendon	9	1.1	190	646.2	65	2,447.0	4	845.0	1	400.0	..	..	..	..	269	4,339.3
Colleton	46	6.3	148	428.7	25	939.0	8	1,419.0	1	735.0	..	..	..	..	228	3,528.0
Darlington	21	2.7	112	321.3	17	515.0	2	534.0	1	814.0	..	..	..	..	153	2,187.0
Dillon	27	3.4	57	143.1	7	240.0	1	130.0	1	497.0	..	..	..	..	93	1,013.5
Dorchester	..	..	95	431.2	37	1,028.0	8	1,619.0	..	..	..	..	..	..	140	3,078.2
Edgefield	2	0.2	31	70.0	7	158.0	2	465.0	..	..	..	..	..	..	42	693.2
Fairfield	5	1.0	57	141.7	9	278.0	..	..	..	..	..	..	..	..	71	420.7
Florence	79	10.7	299	890.7	53	1,687.0	6	1,090.0	1	731.0	..	..	..	..	438	4,409.4
Georgetown	26	4.5	114	312.0	39	1,370.0	5	883.0	..	..	..	..	..	..	184	2,569.5
Greenville	39	5.6	91	174.0	6	239.6	..	..	..	..	..	..	..	..	136	418.6
Greenwood	17	2.7	56	114.0	4	88.0	1	145.0	..	..	..	..	..	..	79	981.7
Hampton	6	0.9	66	163.7	19	568.0	1	173.0	2	888.0	1	2,100.0	..	..	95	3,893.6
Horry	28	3.8	211	566.5	52	1,690.0	..	..	2	1,173.0	..	..	..	..	293	3,433.3
Jasper	16	2.8	80	260.7	42	1,332.0	4	632.0	2	889.0	..	..	..	..	144	3,116.5
Kershaw	15	2.9	76	204.7	19	458.0	4	549.0	1	742.0	1	1,500.0	1	8,340.0	117	11,796.6
Lancaster	16	2.7	53	137.4	6	181.0	..	..	..	..	..	..	..	..	75	321.1
Laurens	10	1.5	49	139.1	10	298.0	4	481.0	..	..	..	..	..	..	73	829.6
Lee	2	0.4	58	201.9	14	330.0	1	200.0	..	..	..	..	..	..	75	732.3
Lexington	8	1.2	78	225.3	16	373.0	..	..	..	..	3	7,876.0	..	..	106	8,918.5
Marion	13	1.6	73	189.7	6	292.0	1	125.0	..	..	..	..	..	..	93	518.3
Marlboro	20	2.8	88	237.9	22	571.0	5	789.0	1	312.0	..	..	1	5,500.0	137	7,412.7

TABLE 5—SUMMARY OF FIRES BY COUNTIES AND MONTHS—FISCAL YEAR 1965-1966

COUNTY	July 1965		Aug. 1965		Sept. 1965		Oct. 1965		Nov. 1965		Dec. 1965		Jan. 1966		Feb. 1966		March 1966		April 1966		May 1966		June 1966	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Abbeville	4	21.9	4	82.0	1	7.0	5	...	10	27.9	7	14.4	7	39.1	11	45.2	6	109.1	7	21.6	2	...	2	3.6
Aiken	...	...	...	...	9	27.6	22	81.1	9	27.6	22	81.1	8	48.7	11	45.2	31	723.1	21	6,341.0	2	1.0	3	79.8
Allendale	...	...	...	...	5	18.7	7	151.5	5	18.7	7	151.5	3	5.0	4	28.0	14	196.0	9	190.0	3	35.8	2	1.5
Anderson	1	3.0	3	4.7	10	29.5	10	39.8	10	29.5	10	39.8	4	4.6	3	29.4	25	168.2	12	50.4	...	...	1	3.0
Bamberg	...	...	...	...	4	8.8	9	733.7	4	8.8	9	733.7	7	4.9	10	112.0	27	859.6	6	102.0	...	...	1	0.2
Barnwell	1	2.0	2	12.8	1	7.0	19	84.6	1	7.0	19	84.6	17	38.2	14	58.2	17	498.4	18	565.6	1	1.2	1	2.5
Beaufort	...	...	...	...	6	25.2	19	31.5	6	25.2	19	31.5	...	...	7	134.0	14	271.1	17	318.0	...	...	1	4.0
Berkeley	2	5.1	...	...	...	...	89	4,033.2	...	...	89	4,033.2	39	743.2	58	804.7	72	1,437.7	31	8,282.7	...	...	1	...
Calhoun	...	...	...	...	6	45.1	6	14.2	6	45.1	6	14.2	2	3.0	1	2.8	14	207.3	4	3,903.9	...	...	...	...
Charleston	...	...	...	...	...	...	19	123.8	...	...	19	123.8	2	20.0	13	67.3	22	270.5	25	351.0	...	...	...	...
Cherokee	...	...	...	...	2	8.5	1	1.5	2	8.5	1	1.5	2	46.5	...	...	11	127.7	3	20.2	...	...	...	...
Chester	...	...	...	...	4	9.5	3	7.1	4	9.5	3	7.1	1	4.8	2	...	18	146.6	10	57.5	1	0.4	1	6.1
Chesterfield	...	...	...	...	13	59.6	10	38.8	13	59.6	10	38.8	2	49.0	1	26.0	22	341.7	18	3,145.3	...	...	2	29.2
Clarendon	...	...	...	...	12	80.1	58	556.1	12	80.1	58	556.1	25	168.6	16	100.4	97	1,697.0	44	1,722.7	4	8.1	...	...
Colleton	...	...	...	...	20	68.4	42	542.8	20	68.4	42	542.8	19	33.1	30	193.4	70	1,549.5	49	1,123.8	3	6.1	1	1.0
Darlington	...	...	...	...	6	62.7	36	145.6	6	62.7	36	145.6	9	22.3	12	224.3	35	235.8	26	1,437.4	2	10.9	1	1.5
Dillon	...	...	...	...	26	94.9	21	27.2	26	94.9	21	27.2	5	21.0	2	1.8	32	212.6	17	667.5	...	...	1	0.4
Dorchester	1	1.8	1	0.1	8	59.0	23	886.6	8	59.0	23	886.6	15	98.5	19	175.5	53	1,272.0	26	634.4	...	...	...	...
Edgefield	...	...	...	...	3	9.4	8	207.6	3	9.4	8	207.6	1	5.1	3	31.4	17	344.4	6	96.1	...	...	...	...
Fairfield	...	...	...	...	2	2.4	19	19.7	2	2.4	19	19.7	2	6.1	6	14.1	25	179.3	8	53.0	2	5.0	...	...
Florence	2	2.4	1	1.2	10	34.1	8	755.6	10	34.1	8	755.6	35	200.5	23	131.4	113	1,113.0	74	1,980.6	3	72.2	4	12.0
Georgetown	2	0.5	1	1.6	37	202.6	145	362.4	37	202.6	145	362.4	11	54.5	12	181.8	58	1,182.4	44	758.8	1	5.0	3	17.5
Greenville	1	0.6	1	0.1	7	20.1	47	45.1	7	20.1	47	45.1	4	0.9	7	7.7	47	167.2	28	153.6	1	0.6	...	...
Greenwood	2	3.6	1	2.5	13	30.8	23	45.1	13	30.8	23	45.1	3	6.1	10	10.7	22	59.4	22	873.0	1	0.1	1	3.2
Hampton	...	...	...	...	5	4.9	6	15.7	5	4.9	6	15.7	8	86.4	17	183.7	23	406.6	14	2,598.6	...	...	...	...
Horry	2	7.8	1	2.0	2	2.4	28	608.9	2	2.4	28	608.9	...	...	...	...	...	...	...	...	...	...	...	...
Jasper	...	...	...	...	22	243.1	93	444.5	22	243.1	93	444.5	22	81.8	16	83.6	76	730.6	45	1,686.4	4	46.7	2	95.7
Kershaw	1	4.8	1	3.0	9	12.3	39	210.9	9	12.3	39	210.9	9	59.9	20	365.3	33	517.9	26	1,812.2	2	90.0	1	4.0
Laurens	4	5.7	1	0.1	5	6.6	17	72.1	5	6.6	17	72.1	7	12.7	5	44.7	42	9,891.2	15	1,741.6	4	3.3	4	3.1
Lancaster	...	...	...	...	5	4.6	16	21.5	5	4.6	16	21.5	2	6.1	2	9.6	24	216.3	13	44.7	1	0.2	...	...
Lee	2	3.8	5	5.1	7	24.6	14	94.2	7	24.6	14	94.2	1	0.3	4	6.6	21	412.6	11	242.2	3	14.2	4	11.0
Lexington	...	...	...	...	1	1.7	9	36.3	1	1.7	9	36.3	...	...	...	...	...	...	...	...	...	...	...	...
Marion	2	1.1	3	2.2	1	0.5	15	74.9	2	0.5	15	74.9	5	10.9	8	124.9	39	702.8	14	7,930.5	2	25.6	3	3.2
Marlboro	...	...	...	...	4	5.8	24	143.2	4	5.8	24	143.2	7	22.1	2	3.2	33	153.8	18	178.3	...	...	1	13.9
McCormick	...	...	...	...	12	43.4	41	344.2	16	195.2	41	344.2	8	29.5	7	13.7	32	224.8	21	6,561.9	...	...	...	...
	...	...	...	...	...	10.1	5	31.1	3	10.1	5	31.1	1	0.6	1	0.3	11	150.2	4	6.0	...	...	...	...

**TABLE 6—CLASSIFICATION BY CAUSES
FISCAL YEAR 1965-66**

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	32	0.6	704.8	22.0
Campers	112	2.1	2,997.3	26.8
Smokers	1,413	25.8	22,098.3	15.6
Debris Burning	1,400	25.6	32,081.5	22.9
Incendiary	1,683	30.8	48,184.8	28.6
Machine Use	229	4.2	10,149.8	44.3
Miscellaneous	598	10.9	11,588.4	19.4
TOTALS	5,467	100.0	127,804.9	23.4

**TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD
(Percent of Total)**

CAUSES	1961-62	1962-63	1963-64	1964-65	1965-66	Average For 5-Year Period
Lightning	2.0	0.9	1.6	1.1	0.6	1.1
Campers	2.8	3.1	3.5	2.8	2.1	2.8
Smokers	31.6	25.6	27.5	29.3	25.8	27.4
Debris Burning	27.3	26.8	24.6	24.3	25.6	25.9
Incendiary	20.6	30.5	21.9	25.0	30.8	26.6
Machine Use	4.0	3.7	5.4	4.0	4.2	4.2
Miscellaneous	11.7	9.8	15.5	13.5	10.9	11.9

TABLE 8—SUMMARY OF FIRES REPORTED IN SOUTH CAROLINA
FISCAL YEAR 1965-66

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville	194,361	39	215.7	.11	5.5
Aiken	477,331	121	7,474.5	1.57	61.8
Allendale	190,786	49	627.7	.33	12.8
Anderson	211,031	70	331.7	.16	4.7
Bamberg	154,407	66	1,834.4	1.19	27.8
Barnwell	161,433	100	1,296.6	.80	13.0
Beaufort	170,505	48	757.1	.44	15.8
Berkeley	404,049	301	15,364.7	3.80	51.0
Calhoun	131,757	30	4,132.0	3.14	137.7
Charleston	264,643	86	848.9	.32	9.9
Cherokee	149,092	23	206.4	.14	9.0
Chester	262,651	53	290.2	.11	5.5
Chesterfield	359,570	72	3,736.6	1.04	51.9
Clarendon	225,189	269	4,339.3	1.93	16.1
Colleton	500,875	228	3,528.0	.70	15.5
Darlington	177,189	153	2,187.0	1.23	14.3
Dillon	146,786	93	1,013.5	.69	10.9
Dorchester	282,250	140	3,078.2	1.09	22.0
Edgefield	196,105	42	693.2	.35	16.5
Fairfield	375,414	71	420.7	.11	5.9
Florence	291,549	438	4,409.4	1.51	10.1
Georgetown	389,793	184	2,569.5	.66	14.0
Greenville	286,608	136	418.6	.15	3.1
Greenwood	175,510	79	981.7	.56	12.4
Hampton	283,378	95	3,893.6	1.37	41.0
Horry	494,462	293	3,433.3	.69	11.7
Jasper	277,557	144	3,116.5	1.12	21.6
Kershaw	419,876	117	11,796.6	2.81	100.8
Lancaster	230,775	75	321.1	.14	4.3
Laurens	276,837	73	829.6	.30	11.4
Lee	117,215	75	732.3	.62	9.8
Lexington	302,394	106	8,918.5	2.95	84.1
Marion	228,579	93	518.3	.23	5.6
Marlboro	174,497	137	7,412.7	4.25	54.1
McCormick	143,541	25	198.3	.14	7.9
Newberry	232,222	33	100.5	.04	3.0
Oconee	233,784	50	203.3	.09	4.1
Orangeburg	377,160	314	5,743.7	1.52	18.3
Pickens	217,575	67	374.1	.17	5.6
Richland	311,022	217	4,529.5	1.46	20.9
Saluda	182,185	34	129.1	.07	3.8
Spartanburg	242,131	91	2,756.6	1.14	30.3
Sumter	231,546	155	3,313.4	1.43	21.4
Union	206,601	39	416.4	.20	10.7
Williamsburg	410,339	248	6,689.9	1.63	27.0
York	277,440	95	1,622.0	.58	17.1
TOTALS	12,050,000	5,467	127,804.9	1.06	23.4

**TABLE 9—FIVE-YEAR SUMMARY
FOREST FIRE STATISTICS**

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Per Cent of Area Burned	Average Area Per Fire (Acres)
1961-62	11,175,000	3,668	35,795.0	0.32	9.8
1962-63	11,175,000	5,441	68,315.1	0.61	12.5
1963-64	11,175,000	3,817	34,752.2	0.31	9.1
1964-65	12,050,000	2,442	18,826.5	0.16	7.7
1965-66	12,050,000	5,467	127,804.9	1.06	23.4
Five-Year Average	11,525,000	4,167	57,098.7	0.50	13.7

**TABLE 10—STATE SUMMARY LAW ENFORCEMENT INFORMATION
Fiscal Year 1965-66**

	Camden	Florence	Kingstree	Newberry	Orangeburg	Spartanburg	Walterboro	STATE TOTAL
Part A.								
1. No. Willful and Malicious Fires	68	380	45	19	33	7	22	574
2. No. Intentional Fires	99	155	455	14	117	36	200	1,073
3. No. Careless and Negligent Fires	335	425	429	295	450	384	435	2,753
4. Total Fires with Fire Law Violations	502	960	929	328	600	427	657	4,403
5. No. Fires with No Fire Law Violations..	209	246	73	121	186	144	84	1,063
6. Total No. All Fires	711	1,206	1,002	449	786	571	741	5,466
Part B.								
1. No. Prosecutions (16-317)	3	..	3	..	..	..	3	9
2. No. Prosecutions (16-318)	26	67	17	26	22	20	28	206
3. No. Prosecutions Other Violations .....	..	3	2	..	6	1	4	16
4. Total No. Prosecutions	29	70	22	26	28	21	35	231
Part C.								
1. No. Convictions (16-317)	3	..	3	..	..	..	3	9
2. No. Convictions (16-318)	26	66	17	26	22	20	28	205
3. No. Convictions Other Violations .....	..	3	2	..	6	1	4	16
4. Total No. Convictions	29	69	22	26	28	21	35	230

TABLE 11—TREE SEEDLING DISTRIBUTION BY LAND CLASSIFICATION 1965-66

A. State Nurseries Source

Land Ownership	Percent of Total	No. Trees Planted
Farmers	26.2	11,085,555
Other Individuals	21.4	9,080,900
Associations & Clubs .....	.8	363,175
Lumber Companies	3.9	1,650,130
Pulp & Paper Companies	18.3	7,762,300
Other Industry	9.7	4,103,700
Schools .....	.7	286,475
State Forests	10.5	4,443,000
Other State Lands .....	.5	172,950
Cities, Towns, Counties .....	.2	81,500
Federal Government	7.8	3,281,000
Total	100.0	42,310,685

B. Other Source Seedlings Planted in the State

Continental Can Company	2,732,500
Catawba Timber Company	2,139,000
West Virginia Pulp & Paper Company	7,164,000
Union Camp Corporation	1,914,000
Williams Furniture Company	73,000
Canal Wood Corporation	196,000
Total	14,218,500
GRAND TOTAL SEEDLINGS PLANTED IN THE STATE	56,529,185

C. Direct Seeding

	Acres
Catawba Timber Company	16
Champion Papers Inc.	100
Duke Power Company	50
International Paper Company	1,585
Lightsey Brothers	882
U. S. Atomic Energy Commission	130
U. S. Forest Service	120
West Virginia Pulp & Paper Company	16
Total	2,899

TABLE 12—SEEDLING DISTRIBUTION FROM STATE NURSERIES AND OTHER SOURCES BY COUNTIES, SPECIES AND AMOUNTS—1965-66

COUNTY	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red- cedar	Yellow- poplar	Miscellaneous Species	Total	Direct Seed- ing Acres
Abbeville	1,499,000	6,000	.....	1,000	12,500	8,000	7,500	1,534,000	20
Aiken	127,000	3,206,500	40,000	7,000	20,000	500	1,000	3,402,000	130
Allendale	340,000	445,500	.....	.....	.....	.....	.....	785,500	.....
Anderson	514,350	46,400	1,000	9,000	20,500	8,800	4,950	605,000	.....
Bamberg	.....	21,500	.....	.....	.....	5,000	.....	26,500	.....
Barnwell	16,000	93,500	18,000	.....	4,500	1,000	.....	133,000	.....
Beaufort	81,000	1,263,500	.....	.....	3,000	.....	.....	1,352,500	.....
Berkeley	1,514,000	1,046,500	312,000	.....	.....	500	5,000	2,873,000	100
Calhoun	61,500	150,500	1,000	.....	1,500	.....	.....	214,500	.....
Charleston	70,000	281,000	.....	.....	1,000	.....	.....	352,500	.....
Cherokee	543,100	9,000	.....	5,000	3,000	8,500	500	589,600	.....
Chester	1,116,800	70,000	.....	.....	.....	6,000	21,000	1,228,300	237
Chesterfield	112,500	1,657,700	2,663,000	.....	2,000	12,000	15,000	4,447,200	.....
Clarendon	181,000	286,000	.....	1,500	500	2,500	2,000	949,430	.....
Colleton	749,130	193,800	.....	.....	2,000	2,500	2,000	370,050	888
Darlington	10,050	350,500	1,000	500	3,000	5,000	.....	513,000	.....
Dillon	301,500	209,500	500	.....	500	1,000	.....	909,000	.....
Dorchester	718,500	189,500	.....	.....	.....	.....	1,000	1,126,550	.....
Edgefield	979,250	141,000	.....	.....	.....	6,300	.....	576,000	30
Fairfield	538,000	8,000	500	.....	2,500	2,000	25,000	235,300	.....
Florence	54,000	170,000	1,500	1,150	3,600	1,000	4,050	2,684,500	.....
Georgetown	2,446,000	235,000	.....	2,000	7,750	12,000	103,500	380,850	.....
Greenville	227,500	3,500	1,000	25,600	700	14,500	5,000	1,770,200	70
Greenwood	1,224,000	525,000	.....	1,000	1,000	2,000	.....	1,998,000	.....
Hampton	337,000	1,658,000	.....	.....	1,000	1,200	.....	1,312,650	.....
Horry	463,000	847,500	500	270	130	.....	50	1,825,000	.....
Jasper	608,000	1,217,000	.....	.....	.....	.....	.....	1,825,000	.....
Kershaw	1,037,700	3,206,500	6,000	.....	6,000	20,500	1,000	4,277,700	100
Lancaster	943,000	85,000	500	1,000	.....	1,000	.....	1,030,500	30
Laurens	1,004,700	70,500	1,000	7,500	3,000	1,000	5,750	1,093,450	60
Lee	178,000	308,000	5,500	.....	.....	1,000	.....	487,000	.....
Lexington	40,500	1,087,500	.....	200	7,650	500	2,000	1,143,850	.....

Marion	108,500	324,500	.....	800	.....	2,500	.....	76,500	510,300	.....
Marlboro	133,000	490,500	.....	500	.....	500	10,000	15,000	651,500	.....
McCormick	988,000	38,000	.....	500	.....	500	.....	1,000	1,028,000	398
Newberry	605,250	9,500	3,500	1,500	.....	3,000	3,000	500	626,250	.....
Oconee	774,075	5,000	.....	47,000	.....	2,975	2,500	5,750	837,300	.....
Orangeburg	451,000	826,600	3,000	500	.....	4,000	31,000	27,000	1,343,100	.....
Pickens	296,050	7,500	6,000	70,035	.....	4,150	17,600	30,950	432,305	.....
Richland	56,150	1,487,500	500	700	.....	5,700	17,600	2,250	1,570,400	.....
Saluda	589,000	166,500	11,000	1,000	.....	3,000	.....	.....	770,500	334
Spartanburg	878,800	41,000	1,000	33,150	.....	7,650	6,100	206,400	1,174,100	.....
Sumter	328,500	722,750	201,000	1,000	.....	2,500	20,500	.....	1,276,250	.....
Union	1,779,400	2,000	.....	2,500	.....	.....	1,000	.....	1,784,900	496
Williamsburg	1,399,400	317,000	1,100	.....	.....	7,000	23,500	750	1,717,500	.....
York	1,319,400	8,000	500	3,500	.....	.....	.....	.....	1,362,650	6
Out-of-State	376,000	341,000	.....	2,500	.....	.....	1,500	500	721,500	.....
TOTALS	28,118,605	23,876,750	3,280,600	227,925	.....	150,805	268,100	606,400	56,529,185	2,899

MISCELLANEOUS SPECIES

Sweetgum	86,800	Scotch Pine	2,800
Cottonwood	8,500	Pitch Pine	1,000
Sycamore	2,000	Mugo Dwarf	1,000
Tupelo Gum	2,000	Cherry Bark Oak	8,500
Black Walnut	18,800	White Oak	15,000
Shortleaf	31,700	Cow Oak	36,000
Virginia Pine	384,100	White Walnut	800
Baldcypress	5,400	Misc. Exotics	2,000

DIRECT SEEDING

Loblolly	2,589
Longleaf	230
Yellow-poplar	10

TABLE 13—CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

COUNTY	Seedlings Planted 1929-65	Seedlings Planted 1965-66	Grand Total Planted to Date	Acres Planted Through June 30, 1966	Acres Needing as of June 30, 1966
Abbeville	21,155,562	1,534,000	22,689,562	22,690	170,473
Aiken	131,552,579	3,402,000	134,954,579	134,955	236,712
Allendale	42,650,595	785,500	43,436,095	43,436	39,634
Anderson	29,425,749	605,000	30,030,749	30,031	191,141
Bamberg	26,929,100	26,500	26,955,600	26,956	37,635
Barnwell	73,737,570	133,000	73,870,570	73,871	62,672
Beaufort	8,817,845	1,352,500	10,170,345	10,170	51,898
Berkeley	32,413,785	2,873,000	35,286,785	35,287	100,907
Calhoun	14,504,845	214,500	14,719,345	14,719	46,754
Charleston	7,308,390	352,500	7,660,890	7,661	66,495
Cherokee	14,289,729	589,600	14,879,329	14,879	122,217
Chester	27,314,235	1,228,300	28,542,535	28,543	143,197
Chesterfield	74,162,165	4,447,200	78,609,365	78,609	152,057
Clarendon	21,541,275	496,000	22,037,275	22,037	24,567
Colleton	42,215,294	949,430	43,164,724	43,165	106,445
Darlington	14,206,080	370,050	14,576,130	14,576	67,849
Dillon	8,286,165	513,000	8,799,165	8,799	30,314
Dorchester	26,034,495	909,000	26,943,495	26,943	78,597
Edgefield	18,200,088	1,126,550	19,326,638	19,327	51,277
Fairfield	22,815,219	576,000	23,391,219	23,391	128,309
Florence	7,493,008	235,300	7,728,308	7,728	51,867
Georgetown	22,823,100	2,684,500	25,507,600	25,508	84,442
Greenville	17,199,669	380,850	17,580,519	17,581	203,096
Greenwood	20,436,457	1,770,200	22,206,657	22,207	54,559
Hampton	36,149,015	1,998,000	38,147,015	38,147	77,361
Horry	22,632,645	1,312,650	23,945,295	23,945	137,229
Jasper	34,432,280	1,825,000	36,257,280	36,257	55,025
Kershaw	95,647,527	4,277,700	99,925,227	99,925	135,305
Lancaster	27,083,203	1,030,500	28,113,703	28,114	113,194
Laurens	38,277,309	1,093,450	39,370,759	39,371	138,449
Lee	12,793,915	487,000	13,280,915	13,281	58,161
Lexington	34,791,360	1,143,850	35,935,210	35,935	149,675
Marion	8,707,255	510,300	9,217,555	9,218	13,546
Marlboro	21,680,910	651,500	22,332,410	22,332	11,423
McCormick	10,093,975	1,028,000	11,121,975	11,122	77,823
Newberry	24,199,273	626,250	24,825,523	24,826	87,284
Oconee	17,026,038	837,300	17,863,338	17,863	237,013
Orangeburg	48,698,365	1,343,100	50,041,465	50,041	50,234
Pickens	15,099,635	432,305	15,531,940	15,532	183,514
Richland	34,261,275	1,570,400	35,831,675	35,832	122,615
Saluda	8,532,971	770,500	9,303,471	9,303	45,722
Spartanburg	33,130,899	1,174,100	34,304,999	34,305	197,345
Sumter	40,241,752	1,276,250	41,518,002	41,518	50,644
Union	23,684,124	1,784,900	25,469,024	25,469	128,533
Williamsburg	15,270,125	1,717,500	16,987,625	16,988	62,443
York	30,461,346	1,362,650	31,823,996	31,824	192,183
Out-of-State	2,850,148	721,500	3,571,648	3,572	.....
TOTALS	1,361,258,344	56,529,185	1,417,787,529	1,417,789	4,627,835

STATE OF SOUTH CAROLINA

REPORT

OF THE

STATE COMMISSION OF FORESTRY

FOR THE YEAR

JULY 1, 1966 to JUNE 30, 1967



JOHN R. TILLER, State Forester
COLUMBIA, S. C.

Printed Under the Direction of the
State Budget and Control Board

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To Honorable Robert E. McNair, Governor, and to the General Assembly of South Carolina:

Sirs: Pursuant to Section 3 of the Act of General Assembly creating the State Commission of Forestry, approved April 26, 1927; which provides that the Commission shall "inquire into and make annual report upon forest conditions in South Carolina, with reference to the preservation of forests, the effect of the destruction of forests upon the general welfare of the State, and other matters pertaining to the subject of forestry and tree growth, including recommendations to the public generally as to reforestation," I have the honor to submit the report of the Commission for the period of July 1, 1966 to June 30, 1967.

Respectfully submitted,

STATE COMMISSION OF FORESTRY
Fulton B. Creech, *Chairman.*

S. C. STATE COMMISSION OF FORESTRY

Members of the Commission

Fulton B. Creech, Chairman, Sumter

A. Brandon Taylor, Jr., Vice-Chairman, Spartanburg

C. H. Niederhof, Charleston

*Robert R. Rigby, Jr., Columbia

Dr. R. C. Edwards, President, Clemson University, Clemson

Administration

John R. Tiller, State Forester and Secretary to the
Commission

John M. Shirer, Assistant State Forester, Fire Control

Edward C. Pickens, Assistant State Forester, Management

Walter T. Ahearn, Assistant State Forester, Information and
Education

Howard R. Scott, Assistant State Forester, Administration

E. R. Vreeland, State Park Director

* Mr. Rigby resigned May 1967 to accept appointment as a Commission member of the new Department of Parks, Recreation and Tourism.

Administration

SUMMARY

State-appropriated funds were provided for salary adjustments; however, losses of both technical and other personnel continued at an excessive rate. A total of 70 employees resigned during the year, or a total of 12%.

The Commission budgeted and expended on all phases of the Forestry and State Park program \$4,102,127.17. Of this total, the Division of Forestry expended \$3,369,295.50 and the Division of State Parks \$732,831.67. (See Appendix for detailed explanation of funds available and expenditures made.) State-appropriated funds amounted to \$2,378,318.00 for the Division of Forestry and \$604,397.48 for the Division of State Parks.

PERSONNEL ACCIDENT AND INJURY

During the year 62 personnel accidents were reported to the S. C. Industrial Commission. Most of these accidents resulted in minor injuries and did not require hospitalization.

Personnel safety was emphasized throughout the year. All accident cases reported were reviewed to determine frequency of similar accidents. Preventive measures were initiated when such instances were noted.

AUTOMOTIVE ACCIDENTS

During the fiscal year Commission personnel driving Commission-owned motor vehicles or personal vehicles on Commission business were involved in 12 accidents. Of the 12 accidents which occurred, 9 were classified as being preventable by the operator. This outstanding safe driving record is a result of continued emphasis being placed on the careful operation of motor vehicles on Commission business through specific training and assistance of the National Safety Council.

PERSONNEL

A large number of Commission employees continue to resign to accept better paying positions. Such resignations handicapped the efficient operation of all Commission activities.

Twelve per cent of the total personnel resigned during the year, county unit personnel being the highest per cent. The number of technical employees who resigned, foresters who assist landowners with timber management problems, continued high.

As in the past, administrative policies, forms and procedures were revised as necessary to afford more efficiency and better working conditions in both central and field offices.

Forest Fire Protection

INTRODUCTION

The S. C. State Commission of Forestry provides basic forest fire protection to all private timberland owners of the state. This fire protection assistance, furnished through county organizations, is based on the premise that the landowner is responsible for prevention and control of fire on his property and receives cooperation from the Commission of Forestry whenever and wherever possible.

Many landowners have enough personnel and are equipped with hand tools and mechanized units to the extent that they are able to adequately handle wildfires in their woodlands.

There are 12,050,000 acres of state and private forest area in South Carolina. In addition to this total area, the U. S. Forest Service protects 587,221 acres within the National Forest boundaries. Other federal agencies own and protect approximately 58,100 acres.

County Organizations:

Each county fire protection organization consists of a ranger, wardens, lookout towermen, and tractor operators. The number of personnel in each county varies according to size and forest acreage. Total county personnel in South Carolina consists of 46 rangers, 137 wardens, 67 tractor operators, and 138 lookout towermen.

County Forestry Boards:

The State Forest Fire Protection Act of 1945 provides for a county forestry board of five members to be appointed by the State Forester upon the recommendation of the majority of the County Legislative Delegation. The individuals who serve on the forestry boards are appointed for a five-year term. An annual board meeting is held each year to discuss and review forest fire protection activities within the county.

State Advisory Committee of County Forestry Boards:

The State Advisory Committee of County Forestry Boards is composed of one delegate from each county board elected by

the board or appointed by the board chairman. This state committee serves in an advisory capacity to the State Commission of Forestry in all phases of forestry activities. The committee meets annually to discuss the proposed forestry program for the coming fiscal year and to consider the budget request which is submitted to the General Assembly.

Cooperative Agreements with U. S. Forest Service:

The Commission of Forestry and the U. S. Forest Service maintain a formal agreement to assist one another with the detection and suppression of fires which occur near the National Forest boundaries.

FIRE PROTECTION ACTIVITIES

Training:

Training of personnel is constantly carried out in the state fire control organization and is one of the most important phases of fire control work. On-the-job training is given special emphasis to tailor instructions to fit the individual and his job responsibility. Periodically, group training is given on such subjects as law enforcement, weather and fire behavior, large fire organization, fire fighting tactics, civil defense, and other phases of the fire control program.

Fire Control Inspections:

Each year, complete fire control inspections are carried out in the counties of the state by central office and district office personnel. These inspections, covering all phases of the fire control job, are designed to improve the efficiency of the fire control program.

The fleet of mechanized equipment undergoes constant inspection. Emphasis is placed on preventive maintenance in order to keep the fire control equipment in a complete state of readiness. These inspections are made by traveling mechanics, district mechanics and the equipment operators.

Fire Control Progress Checks:

Periodically in each district of the state, fire control progress checks are held. The purpose of these checks is to inspect

each phase of the entire fire control program to determine what can be done to improve the over-all activities of the organization. These checks are carried out by the central office fire control staff to maintain a high degree of efficiency in the fire control program in all districts of the state.

Law Enforcement:

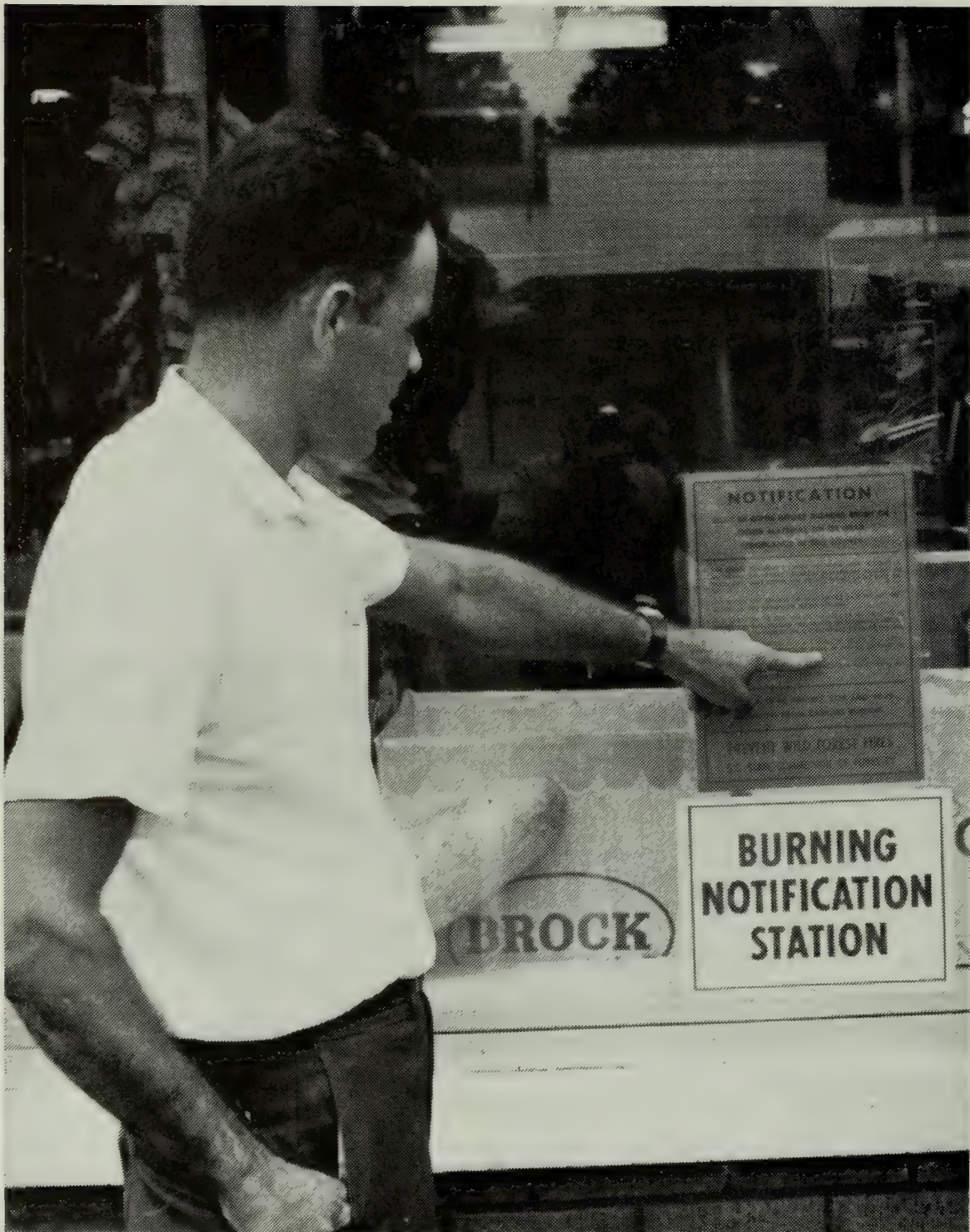
Seventy-one State Commission of Forestry employees now have law enforcement commissions and are empowered to enforce the forest fire laws of the state. These officers have been given specialized training in fire investigation and prosecution of forest fire law violations. This group of commissioned personnel was further trained during the past year at a Law Enforcement Training School held October 10-12, 1966, at Florence, S. C.

Cooperation between the S. C. Law Enforcement Division, local police organizations and Forestry Commission officers continued to be excellent during last year.

Forestry Commission records show a total of 180 cases prosecuted and 174 convictions obtained for various fire law violations. A breakdown of cases is as follows: 23 prosecutions and 23 convictions for violation of the burning permit or burning notification law; 153 prosecutions and 148 convictions for careless and negligent law violations; and four prosecutions and three convictions were obtained under the willful and malicious law.

Burning Permit and Burning Notification Laws:

Counties with the permit law statutes are Chesterfield, Aiken, Orangeburg, Georgetown, Charleston, Greenville, Marlboro, Williamsburg and Horry. Counties with notification laws include Beaufort, Clarendon, Colleton, Hampton, Jasper, Lee, Abbeville, Allendale, Greenwood, Lancaster, McCormick, Newberry, and Union. Counties passing a notification law during the past year included Lexington, Oconee, Spartanburg, Berkeley, Darlington, Dorchester, and Kershaw. A total of 29 counties now have either a permit law or notification law.



Burning notification or burning permit laws in 29 counties help reduce the hazards of careless burning and unnecessary travel for county fire control personnel.

Fire Plans:

Each county organization is provided with a fire control plan which guides and controls fire suppression activities within the unit. The plans are kept current and revised to conform with changing conditions and latest operating procedures.

Plans similar to the fire control plans used in county units are prepared for landowners throughout the state who desire to maintain adequate fire protection on their timberland ownerships.

Intentional Fire Law:

During the 1967 session of the General Assembly, the 1962 Code of Laws of South Carolina was amended by adding Section 16-315 to make it unlawful to intentionally burn lands of another without consent of the landowner or his agent. This law provides a means of prosecution for fires intentionally set where no malice is involved. This law fills a gap which has existed between the willful and malicious law (Section 16-317) and the careless and negligent law (Section 16-318).

Forestry Study Committee:

This eleven-man committee, appointed for the first time during 1955, has been continued by the General Assembly each year since that time. The committee holds a series of meetings and hearings each year and formulates many recommendations on all phases of forestry. An annual report to the General Assembly is made by this Study Committee.

The committee was continued for the 1967-68 fiscal year. Members serving during the 1966-67 year were C. H. Niederhof, Chairman; J. D. Carroll, Vice-Chairman; John D. Long, Secretary; Harry M. Arthur; Frank E. Baldwin, Jr.; George W. McKown; Earl R. Ellerbe; Charles G. Garrett; W. Clyde Graham; Clyde D. Jenkins, Jr.; and Hubert W. Smoak.

Southern States Forest Fire Control Conference:

The twenty-eighth Southern States Forest Fire Control Conference was held at Cumberland Lake, Kentucky, on May 23, 24 and 25, 1967. These annual conferences allow an exchange of ideas between states which tends to promote efficiency and progress in the over-all fire control program.

Southeastern States Forest Fire Compact Commission:

Since 1954, South Carolina has been a member of the Southeastern States Forest Fire Compact Commission. Other states

belonging to the Commission are: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, Virginia, and West Virginia.

The membership of this Commission from each state is composed of a Compact Administrator (the State Forester) and a four-member Advisory Committee. The Advisory Committee for South Carolina consists of: Senator L. Marion Gressette of Calhoun County, Representative Chas. G. Garrett of Greenville County, Messrs. W. L. Rhodes of Hampton County, and R. R. Rigby of Columbia.

The annual meeting of the Forest Fire Compact Commission was held on November 17, 1966, in Atlanta, Georgia.

Forest Fire Stimulator Seminar:

During August of 1966, South Carolina acted as host state for the annual Southeastern States Forest Fire Compact training session. This training centered around the demonstration and use of forest fire simulators. Simulators were furnished



More effective and realistic training in forest fire suppression techniques was the keynote as forest fire simulators from several southeastern states gathered in Columbia for the annual Southeastern States Forest Fire Compact training session.

by the states of Florida, Georgia, North Carolina, the U. S. Forest Service, and one private manufacturer, and were assembled at the Forestry Commission's headquarters near Columbia. Personnel attending the training session included foresters and Weather Bureau personnel from eighteen states and the District of Columbia.

Civil Defense:

The Forestry Commission cooperates with the State Civil Defense Agency in disaster and emergency conditions which occur or may occur in the state. Forestry Commission personnel give communications assistance and are trained to monitor radiological fallout in the event of a nuclear attack.

Fire Towers:

South Carolina has a total of 138 forest fire lookout towers which are operated full time. The U. S. Forest Service operates 17 lookout towers on the Sumter and Francis Marion National Forests in addition to the state operated towers. Towermen from state and federal towers cooperate in spotting and reporting fires which occur within their range of visibility.

Tower Unit Buildings:

During the 1966-67 fiscal year, no major improvements were installed at the towersites. Routine maintenance jobs were carried out at all towers during the year.

ESTIMATED CAPITAL VALUE OF FIRE PROTECTION IMPROVEMENTS

(Based on Replacement Value)

138 Lookout Tower Units	\$2,947,503
46 Fire Danger Measurement Stations	3,450
100 Miles Telephone Line	30,000
Central Radio Shop and Map Laboratory	25,000
Central Repair Shop and Warehouse System	286,480
7 District Repair Shops	35,000
<hr/>	
Total	\$3,327,433

Radio:

The radio system was improved by the addition of a number of transistorized mobile units in tractors and ranger pickups

in accordance with the overall plan to gradually replace all outdated tube type mobile units.

An all-transistorized mobile relay base station was installed in Columbia to replace the one formerly located at Neeses.

The preventive and system maintenance program proceeded according to schedule, with a resulting decrease in equipment breakdown.

Several additional portable radio units were purchased for use in aircraft for fire detection. These have proven invaluable in this respect.

ESTIMATED CAPITAL VALUE OF RADIO IMPROVEMENTS AND EQUIPMENT

9 Remote Control Base Units 250 watt ...@	\$3,000	\$27,000
1 Remote Control Base Unit 100 watt ...		2,000
5 Remote Control Base Units 60 watts...@	1,400	7,000
7 Mobile Relay Base Units@	1,600	11,200
180 Local Control Base Units@	550	99,000
279 Mobile Units (Tube Type)@	550	153,450
10 Mobile Units (Transistorized) 80 watt (For Mobile Relay)@	810	8,100
74 Mobile Units (Transistorized) 80 watt@	650	48,100
95 Mobile Units (Transistorized) 15 watt@	450	42,750
18 Portable Units (1½, 3, 5 & 8 watts) ...@	700	12,600
138 Auxiliary Receivers@	155	21,390
9 Radio Towers		35,000
TOTAL		<hr/> \$467,590

Equipment:

Nine additional medium suppression units, complete with truck and tractor were acquired during 1966-67. These units were assigned to wardens in Anderson, Beaufort, Berkeley, Calhoun, Colleton, Horry, Jasper, Laurens, and Pickens Counties.

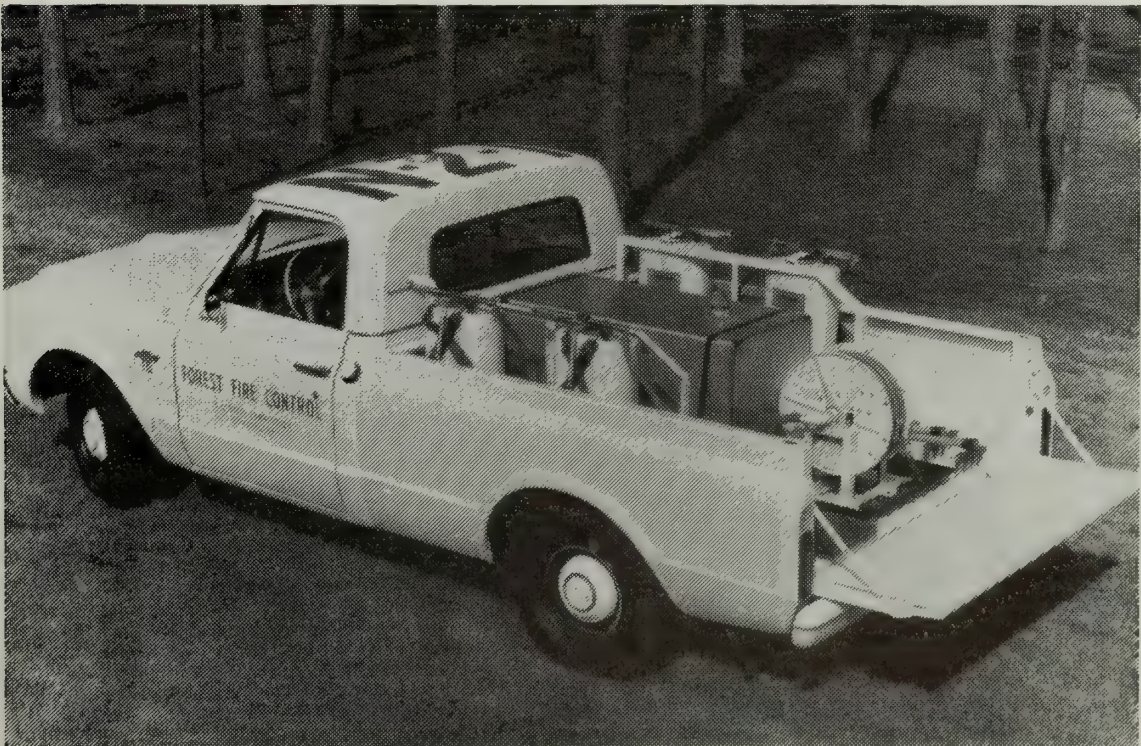
Eleven new medium tractors were bought as replacements for worn out units, and eleven old medium transport trucks were replaced. Three heavy suppression unit transports were replaced at Spartanburg, Newberry, and the Central Repair Shop. Also three heavy crawler tractors were replaced at

Walterboro, Florence and Kingstree. Eight pickup trucks and three radio technicians' station wagons were included in 1966-67 vehicle replacements.

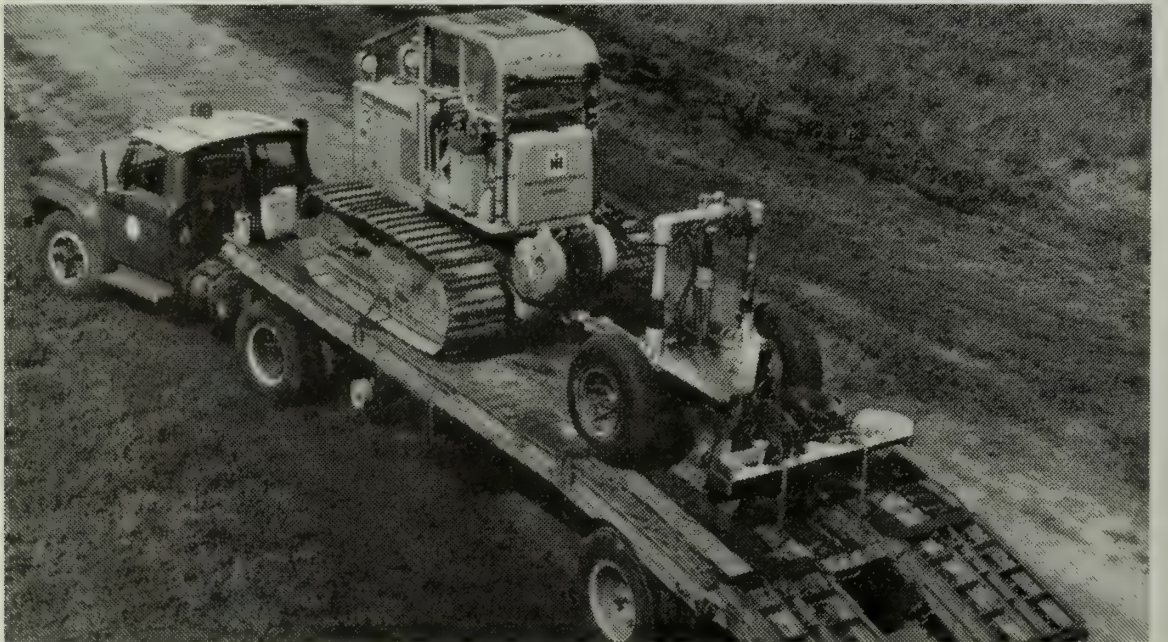
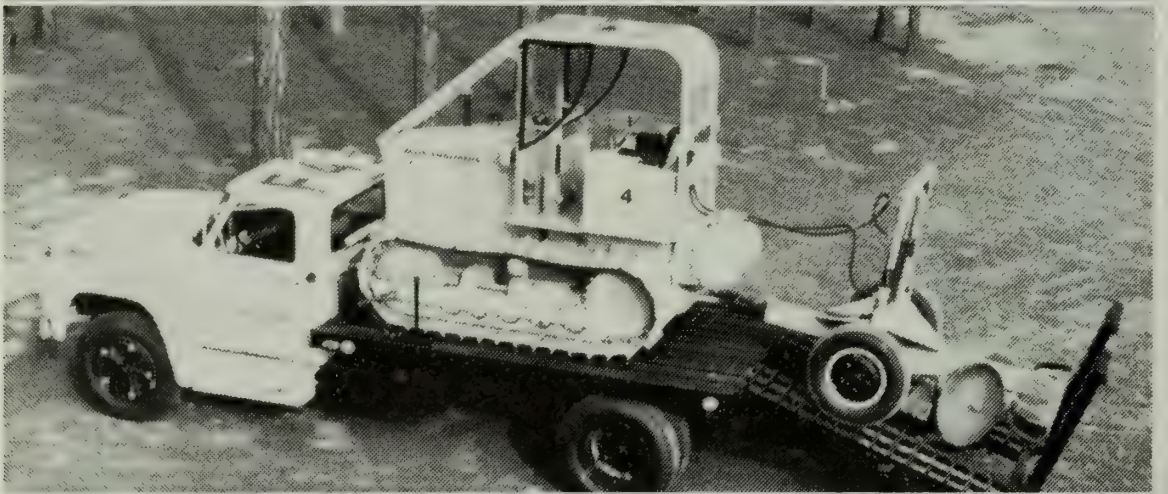
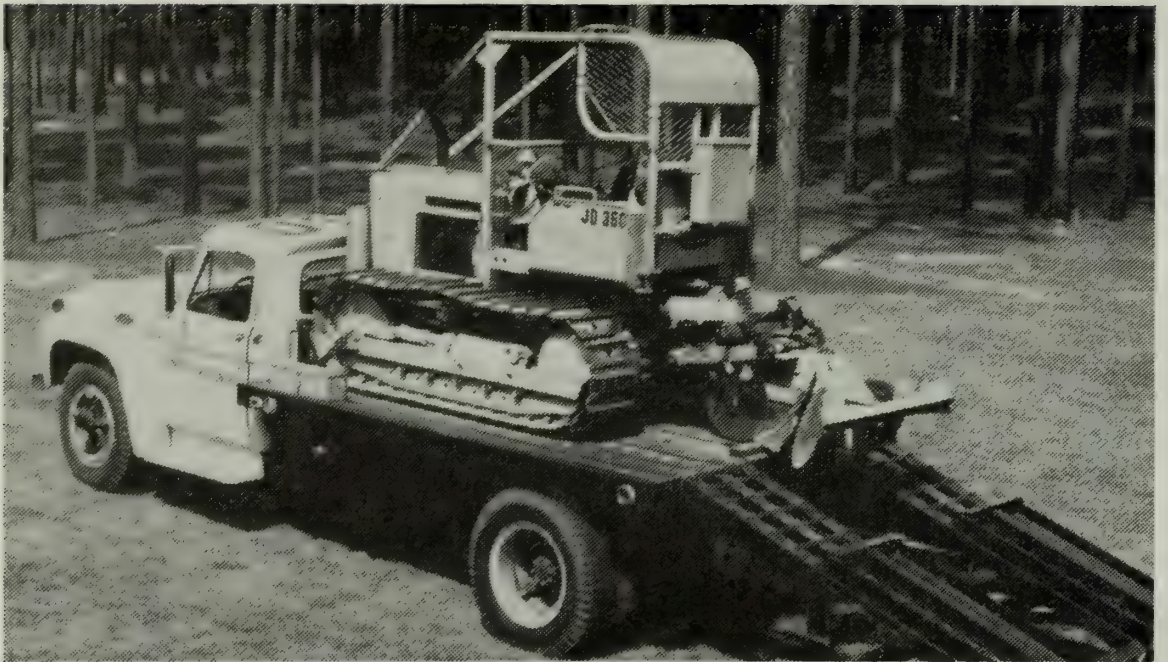
INVENTORY OF BASIC FIRE TOOLS AND EQUIPMENT AND ESTIMATED REPLACEMENT VALUE

June 30, 1967

1510 Back Pack Pumps	\$ 52,850
5014 Fire Rakes	17,220
1950 Fire Swatters	8,675
430 Backfire Torches	12,900
12 Heavy Suppression Tractor-Plow Units w/Transports	272,000
102 Light Tractor-Plow Units w/Transports	1,122,000
2 Heavy Emergency Fire Suppression Units	64,000
3 Dump Trucks	15,000
3 Heavy Lowboy Truck-Transports	10,000
45 Ranger Pickup Trucks	78,750
2 ½-Ton Jeeps	4,500
7 Sedan Delivery Trucks	14,000
1 2-Ton Stakebody Truck	3,825
13 ½-Ton Pickup Trucks	23,000
TOTAL	\$1,778,720



Every county ranger is equipped with a pickup, hand-tools, 5 gallon back pack pumps and engine driven pumps with a 100 gallon reserve tank. Large letters and numbers on top of the truck cab help identify the vehicle in plane-to-ground communications.



Mechanization proves vital in the Commission's efforts to help landowners of the state reduce loss of valuable timber to wildfire. Located strategically throughout the state are 102 light tractor-plow units with transports (two types shown above) and 12 heavy suppression tractor-plow units with transports (below).

Equipment Maintenance Shop:

Since March of 1964, the S. C. State Commission of Forestry has had its central fire control equipment and maintenance shops and warehouses at 5500 Broad River Road, Columbia, S. C. Heavy and specialized repairs are made to all fire control equipment and all new fire control equipment is processed at the central shop.

Two traveling mechanics, headquartered at the central repair shop, make periodic inspections in the field of all trucks and tractors. At the time of the inspection, the mechanics, assisted by the district mechanics and equipment operators, make such repairs as they are equipped to handle. During the past year the traveling mechanics made 473 complete field inspections of equipment and conducted 1,252 field repair jobs. Installations of fire-fighting equipment were made on 19 new trucks.

Central shop personnel made many repairs to equipment owned by the Commission and made many items necessary for field use. Some of the work handled by the mechanical force is listed below:

Major repairs were made to 15 tractors, 4 light trucks, 12 heavy trucks, 4 light plows, 2 heavy plows, and 1 heavy trailer.

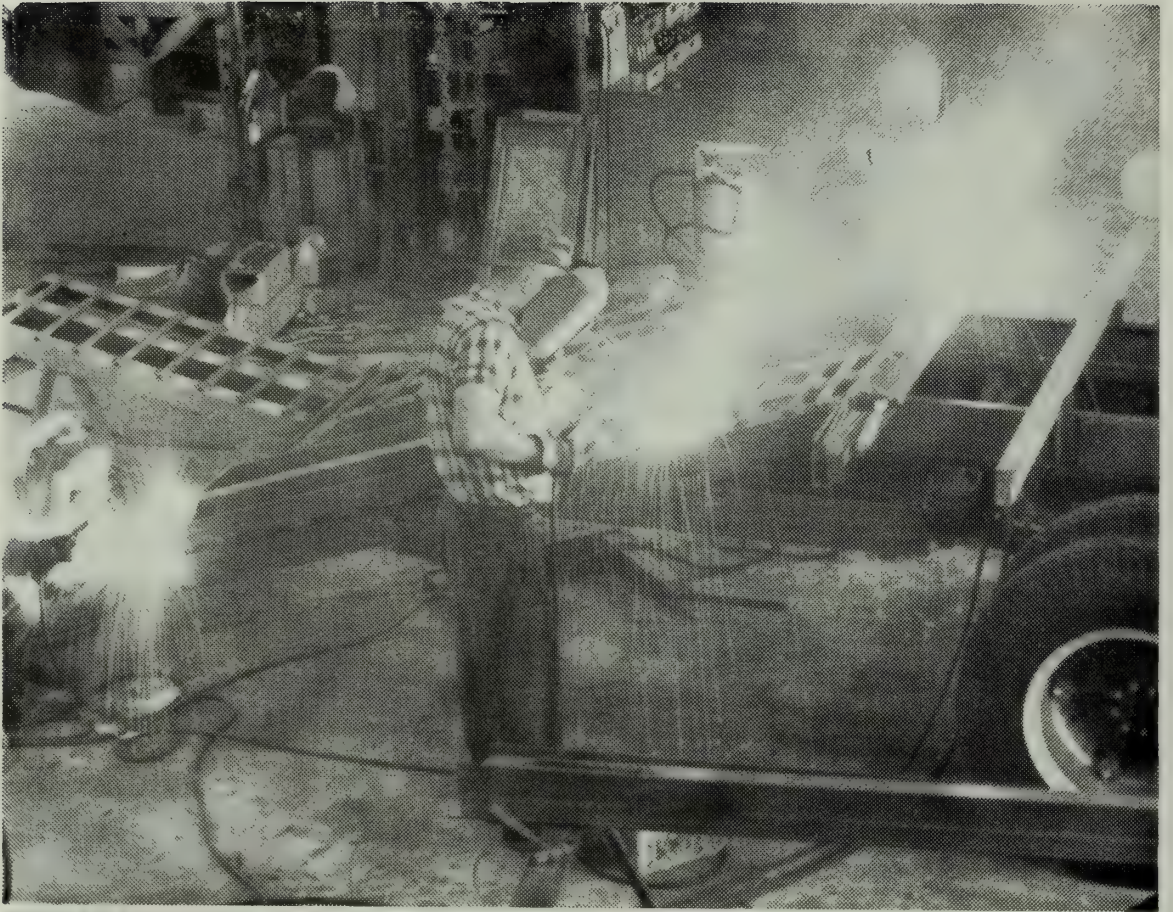
In addition to repair work, many items are adapted to field use or are manufactured at the central shop.

District Repair Shops:

During the fiscal year, equipment maintenance shops were in operation at each of the seven district headquarters. The facilities are used for warehousing certain materials and supplies necessary for operation of the forestry districts and are headquarters for mechanic-heavy unit operators who, in addition to operating the heavy suppression units, are responsible for maintenance of all mechanized equipment in the district.

Columbia Radio Shop:

The central radio communications maintenance and repair shop is located at 241 Catawba Avenue in Columbia. All activities, including installations, maintenance, and repair of communications equipment by the radio technicians assigned to



New fire control equipment (above) is processed at the shop as periodic inspections (below) are made in the field to see that all equipment is kept in good repair and ready for any emergency.



Two tanker units (1500 gallon unit shown above) were added this year to the Commission's fire fighting capabilities as experiments with new types of tractor equipment (below) continues.

the outlying district repair shops, are administered from this central headquarters.

Fire Control Maps:

Since 1958 a map laboratory, complete with drafting room and map making facilities, has been operated by the Commission of Forestry. All maps required in forest fire protection activities in the state are made at this laboratory facility.

Tankers:

Two fire suppression tankers were built and readied for field use during the year. One 450-gallon tanker unit was built at the Camden District Repair Shop and a 1500-gallon tanker was constructed at the Central Repair Shop in Columbia. Both tankers are equipped to pump either water or chemical fire retardants.

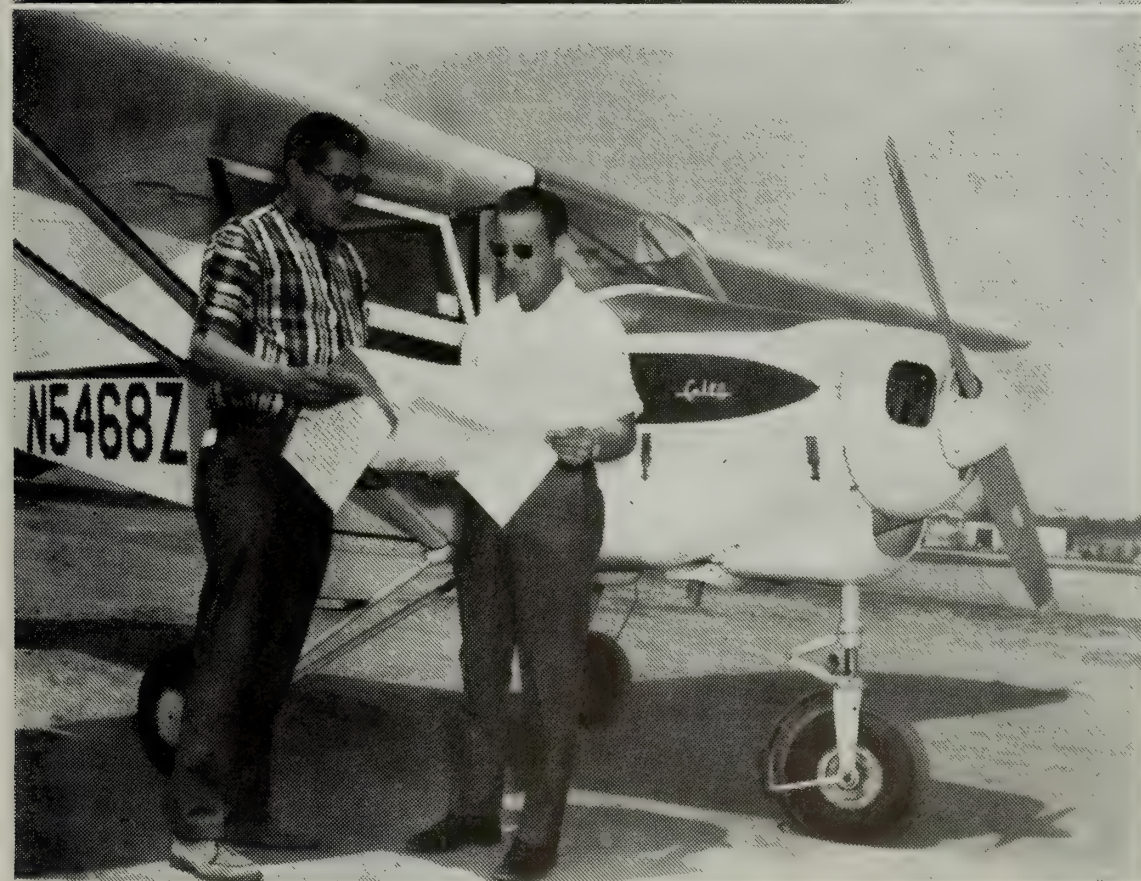
Fire Simulator:

Work was begun during 1966-67 on South Carolina's first forest fire simulator. This simulator is being built at the Central Repair Shop and will be ready for use during the fall of 1967. The simulator will be portable and will be in training use in all sections of the state.

Aerial Detection:

The Forestry Commission continued to intensify its use of aircraft in the forest fire control program during the fiscal year. Aircraft were used in all forestry districts of the state to promptly detect, investigate and report wild forest fires. Two-way radio equipped planes were also used to a great advantage in directing ground fire suppression activities on a number of large fires during the spring months. The flying is conducted on a rental basis whereby local aircraft concerns provide the planes and pilots and the Commission of Forestry furnishes aerial observers and two-way radio equipment. The use of aircraft in fire detection and suppression operations has contributed tremendously to the efficiency and effectiveness of the fire control program.

The following table shows hours of aircraft use last year by month in each district.



Aerial detection proves invaluable in efforts to intensify the assault on the ravages of wildfire. During the year Commission foresters spent 1800 hours in the air providing prompt detection, investigation and reporting of wildfires.

SUMMARY OF AIRCRAFT USE—FISCAL YEAR 1966-1967

	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>	<i>Jan.</i>	<i>Feb.</i>	<i>Mar.</i>	<i>Apr.</i>	<i>Total</i>
Camden	2	8	3	7	22	68	182	292
Florence	1	41	22	6	43	92	208	413
Kingstree .....	..	5	14	9	31	72	175	306
Newberry .....	..	....	2	....	....	13	58	73
Orangeburg ....	..	22	3	4	19	48	116	212
Spartanburg ....	..	....	....	....	....	19	57	76
Walterboro .....	..	47	24	3	28	102	186	390
Total	3	123	68	29	143	414	982	1762

The nearly 1800 hours flown during the past year represents the heaviest use of aircraft ever recorded by the Forestry Commission.

Firebreak Plowing Service:

Since 1964 the S. C. Forestry Commission has been authorized by the General Assembly to plow firebreaks for private woodland owners, charging at the rate of \$8.00 per hour for medium suppression equipment and \$10.00 per hour for heavy suppression equipment.

Listed below is a summary of firebreak service for the fiscal year 1966-67:

FIREBREAK SERVICE BY DISTRICT

DISTRICT	<i>Hours Medium Units</i>	<i>Hours Heavy Units</i>	<i>Number Properties</i>	<i>Approximate Miles Plowed</i>
Camden	75	18	30	140
Florence	85	18	48	102
Kingstree	157	49	72	209
Newberry	7	....	3	7
Orangeburg	20	27	24	73
Spartanburg	17	....	3	20
Walterboro	246	15	106	272
Total	607	127	286	823

Fire-Weather Forecasting:

Regular and special fire-weather forecasts are available to the S. C. Forestry Commission and other interested agencies and individuals through the U. S. Weather Bureau Station in West Columbia. These fire-weather forecasts, received daily during fire season by the Forestry Commission, are prepared

by a fire-weather specialist at the Weather Bureau Station. Special forecasts are obtained during periods of extreme fire danger and for areas having large going fires.

Fire Danger Measurement:

Fire danger measurement stations are maintained in each county of the state. Stations are read twice daily and the weather information disseminated to all fire control personnel for their guidance in work planning and fire suppression readiness. Thirteen county stations have been selected to furnish information to the S. C. fire-weather forecaster to assist with general forecasting. Forest fire danger is rated by Class day ranging from 1 to 5, with 1 being the least danger and 5 the greatest. During the past year, average danger station records indicated the following: 189 Class 1 days, 86 Class 2 days, 58 Class 3 days, 29 Class 4 days, and 3 Class 5 days.

Legal Fires:

Legal fires are all forest fires which are previously authorized by the landowner, and started by him or his authorized agent, and which burn entirely upon his land. Legal fire records show that individual landowners conducted 1,883 fires which burned 285,174 acres for various purposes during 1966-67. Fires used in hazard reduction totaled 938 and burned 126,704 acres. A total of 373 fires burning 116,911 acres were handled on hunting preserves for the purpose of improving woodland hunting conditions and game management. Burning conducted to reduce debris and rough in woodlands accounted for 226 fires and 14,930 acres burned. Burning of timberland for grazing purposes showed a total of 230 fires burning 6,161 acres, and 116 fires burning 20,468 acres were carried out for miscellaneous purposes such as destruction of insects, varmints, etc.

FOREST FIRE SUMMARY

Forestry Commission records show a total of 4,988 fires burned 69,580.4 acres in fiscal year 1966-67. This represents 0.58% of the 12,050,000 acres of woodland under protection in the state. The average fire size was 13.9 acres.

Introduced by Messrs. Cuttino
and Goodman.

A CONCURRENT RESOLUTION

COMMENDING THE SOUTH CAROLINA FORESTRY COMMISSION
FOR AN OUTSTANDING JOB IN PREVENTING AND ARRESTING
THE SPREAD OF FOREST FIRES.

WHEREAS, South Carolina is caught in a long seige of
dry weather; and

WHEREAS, such inordinate dryness has increased the
hazard of fire destruction to the State's forests and woodlands; and

WHEREAS, this imminent danger has taxed the physical
and mental energies of the personnel of the Forestry Commission; and

WHEREAS, their alertness and abnormal work detail
has prevented the loss of valuable timberland and profitable acreage to
fire.

NOW, THEREFORE,

BE IT RESOLVED by the House of Representatives,
the Senate concurring:

THAT the State Forestry Commission and its personnel

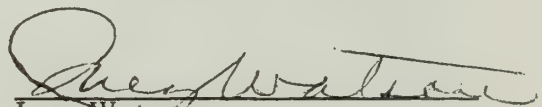
is commended for an outstanding job in preventing and arresting forest fires during this period of abnormal dryness.

BE IT FURTHER RESOLVED that a copy of this Resolution be sent to the State Forestry Commission.

State of South Carolina
In the House of Representatives
Columbia, South Carolina
April 18th, 1967

I hereby certify that the foregoing is a true and correct copy of a Resolution adopted by the South Carolina House of Representatives and concurred in by the Senate.

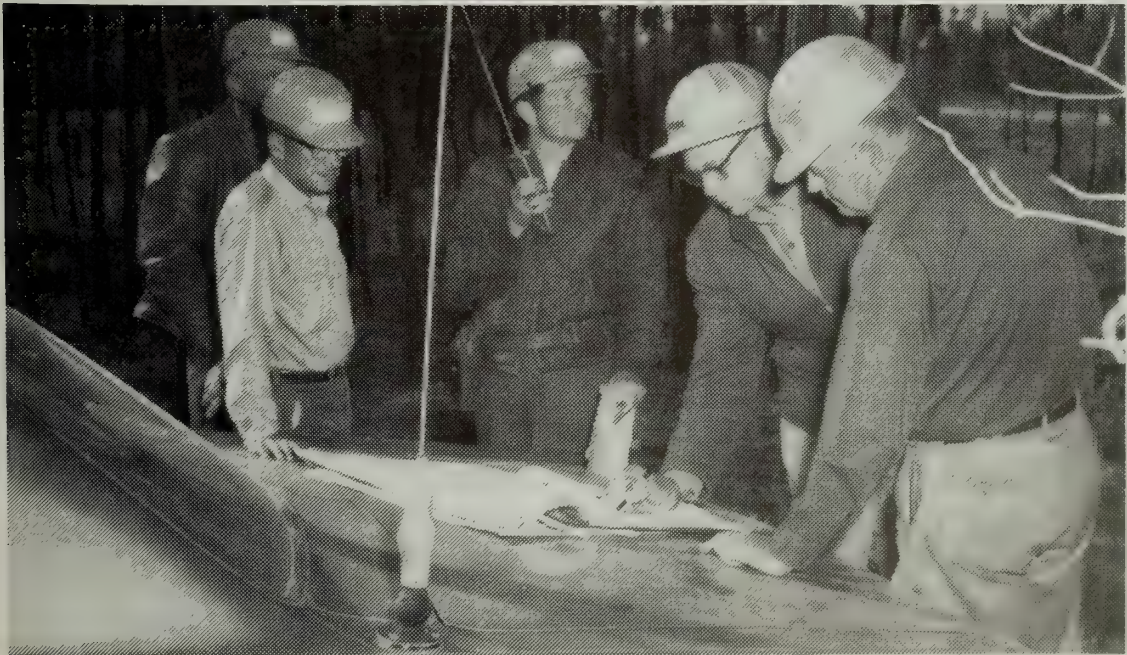
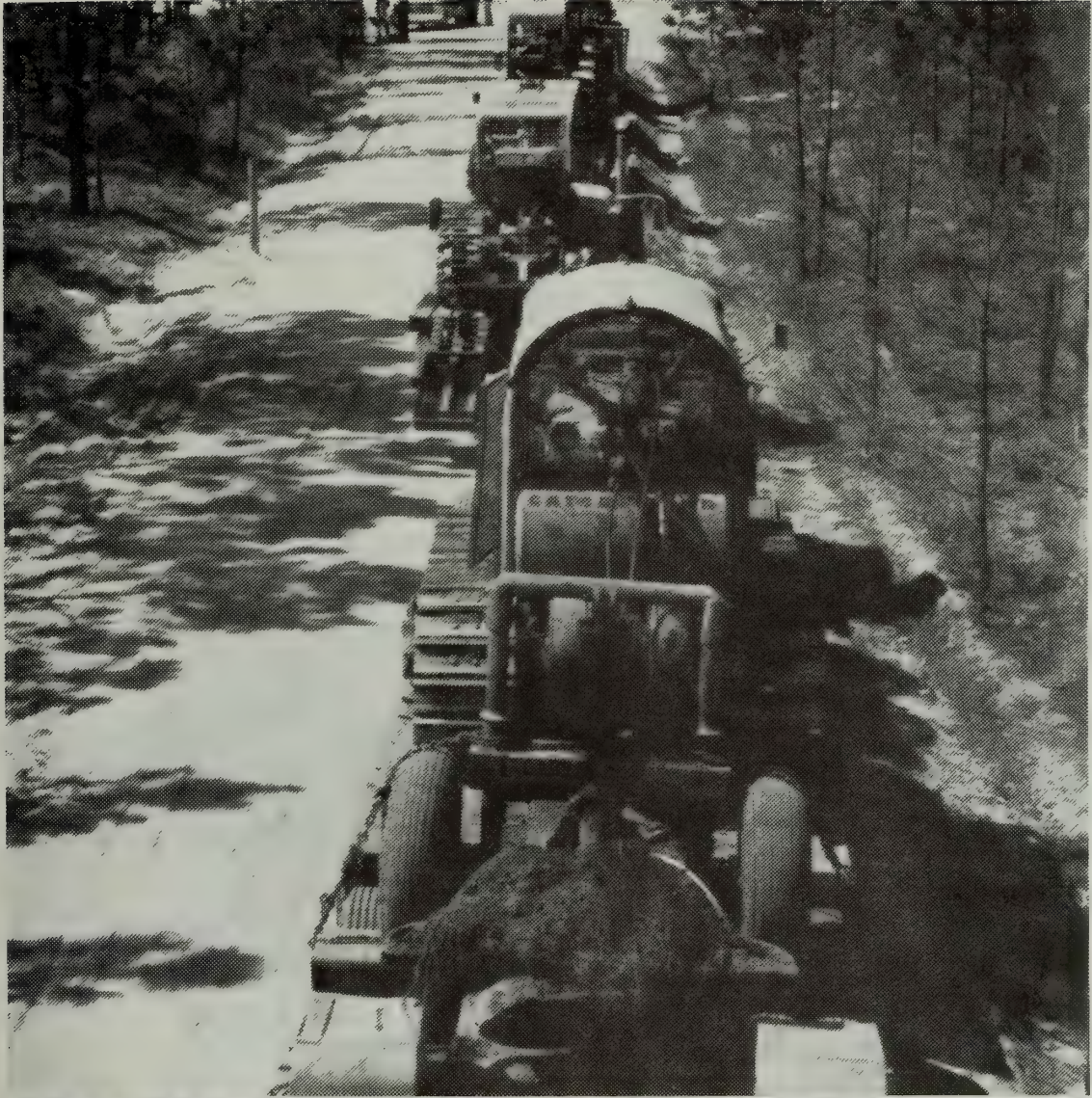



Inez Watson
Clerk of the House



The road (above) forty feet wide was insufficient to stop a fire from spotting across.

Roaring through the underbrush and tree tops (below) high winds and very low humidity gave the fire a good start.



First fire fighters on the scene found an uncontrollable situation, requiring a call for additional men and equipment (above) and the establishment of a "headquarters" or base of operation (below).



With initial suppression plans made by the fire boss, sector bosses unload equipment assigned (above) and in some strategic points plow three or more parallel breaks (below) to better insure against breakovers from backfires set.

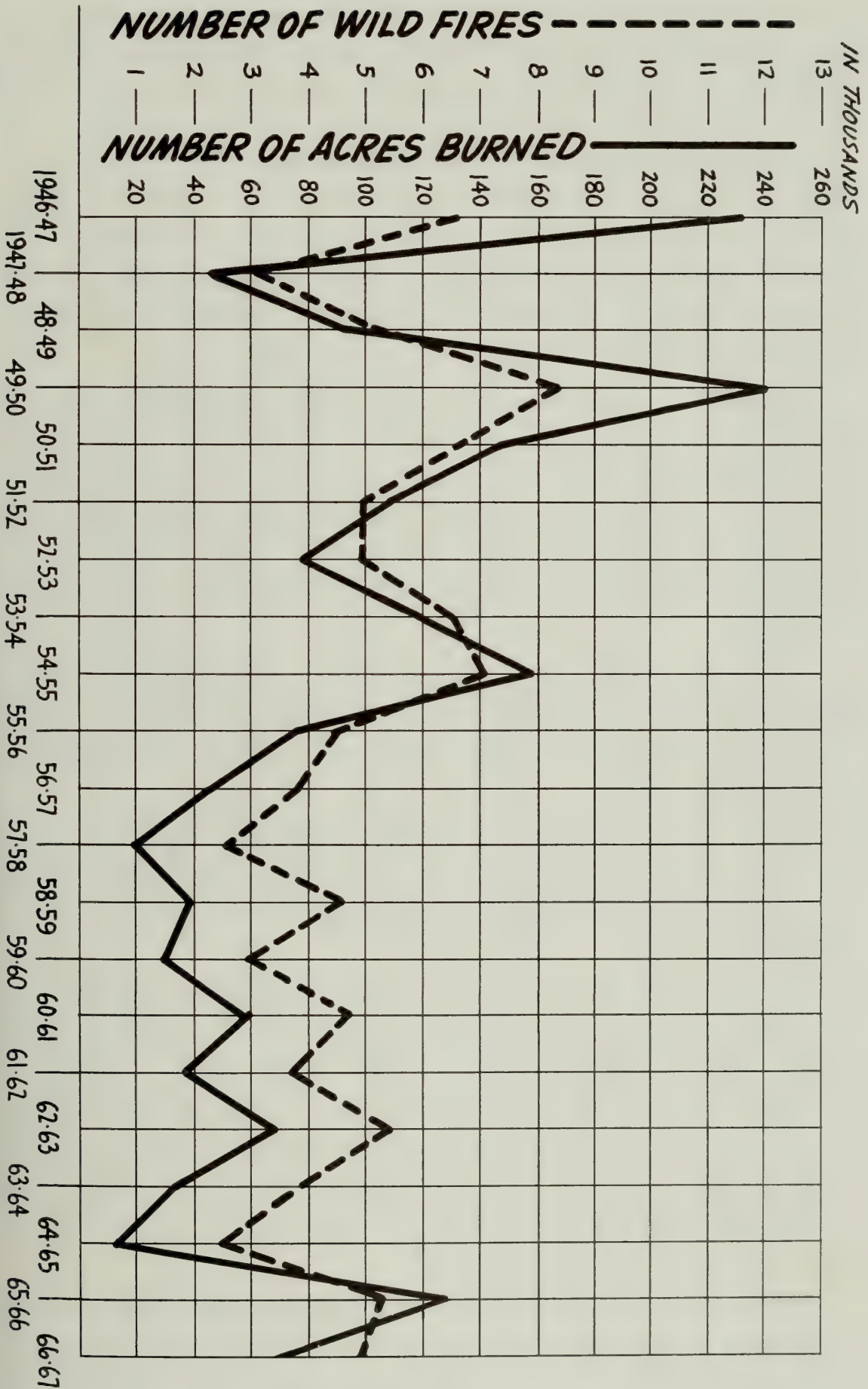


A tractor operator takes a break to refuel (above) before returning to the smoke and ashes (below) to continue the battle to suppress the fire.



After burning for three days and charring 5000 acres of woodland, the fire is brought under control. Now the important job of mop-up and patrolling the perimeter is begun (above) to insure against breakovers.

It's a good feeling to know that the fire is finally out as can be seen on the faces of tired but relieved fire fighters (below).



The highest fire occurrence and heaviest acreage loss was experienced in March and April. Forty-eight percent of the total fires and sixty-eight percent of the total acreage burned during these two months. Fire occurrence for the past year was down only slightly from the previous year when 5,467 fires were recorded. However, in spite of fire weather which was equal to or worse than the previous year, acreage loss for 1966-67 was held to approximately half that lost during 1965-66. Records showed that 127,804.9 acres burned in the 1965-66 fiscal year, the worst in eleven years.

The 1967 spring fire season was again characterized by dry conditions with much windy weather and a rainfall deficit in both March and April. Fires started readily and were difficult to control. An alert fire control organization, good equipment, coupled with excellent cooperation from many agencies and individuals helped keep South Carolina's acreage loss to near normal.

Large fires were fewer than in the year before. During 1966-67 there were 11 fires which burned over 300 acres each, 6 of these burned over 1000 acres each, and 1 fire exceeded 5000 acres in size.

The leading causes of fires in order of importance were incendiary (intentionally set fires), smokers, and debris burning. These three fire causes accounted for 81% of the fires in the state.

Counties with heavy losses included Berkeley with 215 fires burning 4,257.5 acres, Florence 417 fires and 4,903.0 acres, Aiken 121 fires and 4,721.1 acres, Horry 371 fires burning 13,712.4 acres, and Williamsburg 271 fires burning 4,494.8 acres. Counties experiencing lighter losses were McCormick with 15 fires burning 29.6 acres, Newberry 24 fires and 361.0 acres, Saluda 11 fires and 47.3 acres, and Calhoun with 20 fires burning 61.2 acres.

Precipitation in South Carolina during fiscal year 1966-67 was 3.30 inches less than the previous fiscal year. The 45.04 inches of rainfall recorded at the 46 fire danger measurement stations in the state represent a departure from normal—0.42

inches below the long-time average. The average amount of rainfall experienced over the state and the departure from normal by months is shown below :

<i>Month</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
July, 1966	4.29	— 1.47
August, 1966	5.62	+ .32
September, 1966	4.35	+ .96
October, 1966	2.42	— .30
November, 1966	1.44	— 1.10
December, 1966	3.36	— .13
January, 1967	4.34	+ 1.04
February, 1967	3.81	+ .19
March, 1967	2.68	— 1.59
April, 1967	2.58	— 1.02
May, 1967	5.45	+ 2.07
June, 1967	4.70	+ .61
TOTAL	45.04	— .42

A five-year summary of precipitation by fiscal years is shown below :

<i>Year</i>	<i>Amount Rainfall (Inches)</i>	<i>Departure from Normal (Inches)</i>
1962-63	50.03	+ 3.47
1963-64	53.93	+ 8.47
1964-65	70.00	+24.54
1965-66	48.34	+ 2.88
1966-67	45.04	— .42
Average	53.47	+ 7.79

Forest Fire Fatality:

South Carolina recorded its first forest fire fatality in many years during the spring fire season. On April 6, 1967, Mr. Arlie Edward Scott, Jr., 25, was fatally burned while

fighting a forest fire near Windsor in Aiken County. Mr. Scott died while trying to escape a large fire that burned 4000 acres of Aiken County forest land.

Forest Management

The forest management program has remained at about the same level of operation for the past five years. The major emphasis of the Commission's management program was directed toward assisting small private owners in the management of their woodland properties. More than half the total woodland area of the state has been examined by foresters and recommendations made for better timber production.

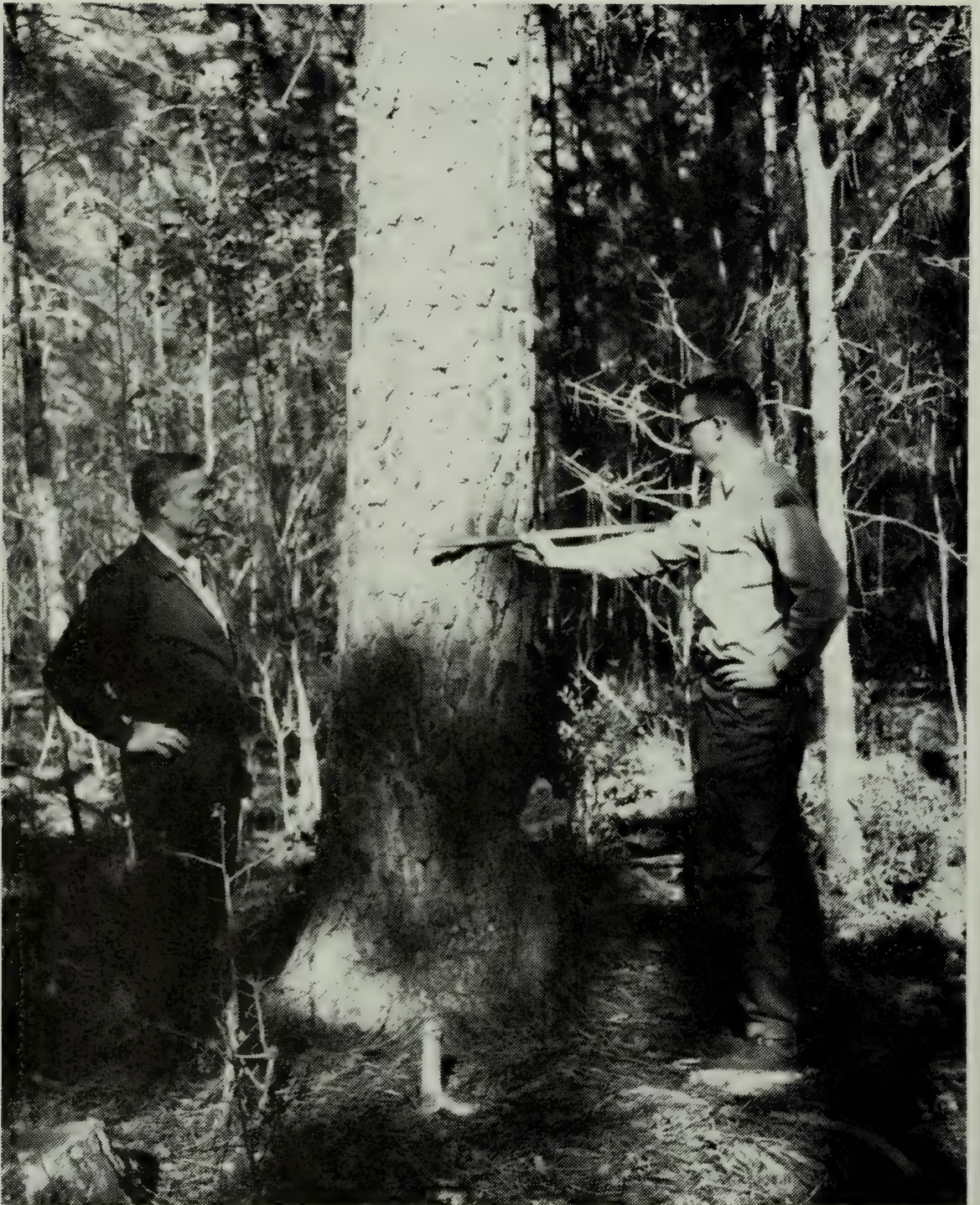
The 1957 Forest Survey shows 77 percent of South Carolina's woodland owned by small private landowners; public ownership was 9 percent and industry ownership 14 percent.

Technical forestry personnel of the State Commission of Forestry offer forest management assistance to any landowner in the state upon request. This assistance consists of an examination of the landowner's woodland area, after which the forester gives the landowner, in writing, recommendations covering the work that should be done to improve the stand, maintain it in a productive condition, harvest timber products or any reforestation work necessary on idle or understocked areas. Also included are recommendations for protection from fire, insects and disease.

During 1966-67 the Commission had a total of 29 men devoting full time to the forest management program, including the small watershed activities. These men assisted 1,908 landowners with primary forest management plans and handled 1,338 requests for the Agricultural Stabilization and Conservation Service. These men also marked 344 tracts covering 9,203 acres amounting to 10,259,690 board feet of sawtimber and 3,164 cords of pulpwood. There were 13 active watershed projects on which critical area planting and gully control work and/or technical forestry assistance was carried out.

On large properties where considerable timber marking work is needed, Commission foresters encourage the landowners to employ a private consulting forester. Commission foresters also work closely with industry foresters who give direct assistance to landowners.

Landowners continue to receive reasonably good prices for selectively marked sawtimber and pulpwood. The demand for all forest products was steady and prices remained firm.



More than half of the woodland in the state has been examined by foresters who made timber management recommendations.

Non-technical qualified rangers continued to handle some non-fire control jobs where this would not interfere with their fire control activities. In Edgefield and Chester Counties technical forester-rangers handled both the fire control and management activities in their county.

The State Commission of Forestry operates four state forests. Combined areas of these state forests represent about one percent of the total forest area of the state. Experimental

and demonstration work and all forms of multiple use forest management activities were continued. The special program to rehabilitate unproductive scrub oak lands on the state forests was completed in May 1967. Since the program was authorized seven years ago 39,000 acres have been cleared and reforested. All of this was financed with receipts from state forest timber sales, rentals, etc.

The four state tree nurseries were in operation during 1966-67 with the Ridge Nursery operating on a standby basis. It was reduced to this status in May 1965. Small lots of trees and cover crop seed for other nurseries will be produced here in 1967-68.

Some of the new programs initiated by the federal government such as Rural Area Development, Appalachia and related programs required considerable time of technical personnel.

The new statewide inventory of South Carolina forest resources was begun in August 1966. As of July 1, 1967 almost one-half of the field work had been completed. Preliminary figures for growth trends, woodland acres, etc. for the Piedmont section were published in July 1967. The entire survey will be completed by the fall of 1968.

MANAGEMENT ASSISTANCE

The 29 man-years of forest management time of field foresters were directed toward assisting private landowners with their woodland management problems. The four Clemson University Extension Service foresters assisted in this program, primarily with promotional and demonstration effort.

Any landowner in the state can receive this service. A forester, with the landowner or his agent, will look over the woodland, give on-the-ground advice and prepare a report covering recommendations on any cutting, fire protection, insect and disease control and protection, timber stand improvement work and reforestation measures needed. No charge is made for this service.

Where cutting of timber is recommended, a forester of the State Commission of Forestry will, at the request of the landowner, mark the timber to be cut, provide the landowner with an estimate of the volume marked for cutting, and furnish a list of prospective buyers, a suggested form of advertisement,



On-the-ground assistance in forest management is available on any South Carolina woodland. After discussion with the owner, the Commission forester prepares a written management plan for his use.

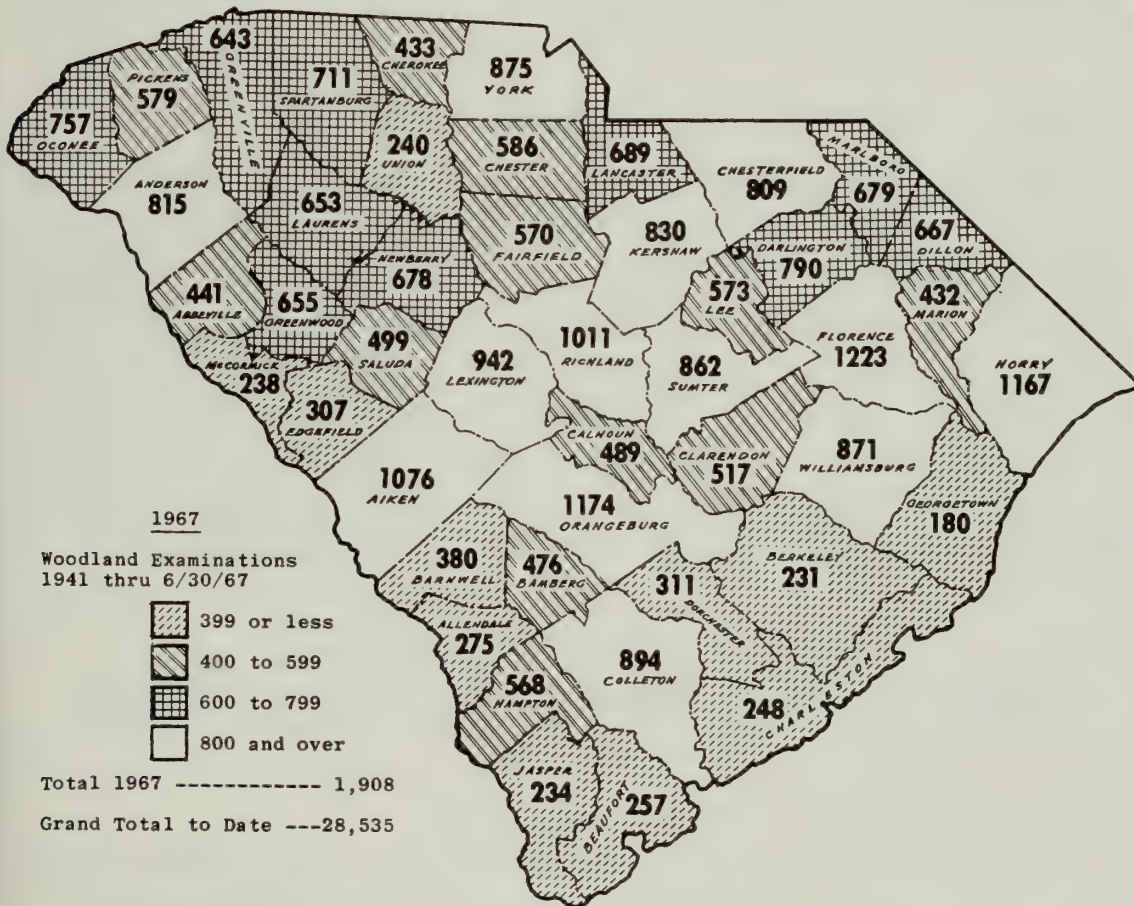
and a sample timber sale agreement. The charge for this service is 75 cents per thousand board feet and 25 cents per cord for timber actually marked and tallied. All other services are provided free of charge.

In addition to the above, recommendations are also given on prescribed burning in pine types in the coastal plains section. Prescribed burning is a technical measure which involves the application of fire to woodlands under conditions of proper weather, soil moisture, season, time of day and forest type. Fire as a tool can be beneficial in the control of undesirable hardwoods, seedbed preparation, control of "brown spot" disease of longleaf pine and reducing fire hazards. Recommendations for the use of prescribed fire are made only after very careful analysis with the landowner of the forest conditions to be sure that benefits will be greater than probable damages.

During the year Commission foresters made 1,908 examinations of 201,245 acres of forest land, and selectively marked

10,759,690 board feet of sawtimber and 13,164 cords of pulpwood for 344 landowners on 8,203 acres of forest land.

In addition to woodland examinations and marking services, a large number of requests for general information and advice were answered by the Columbia and district office technical forestry staffs. These requests included information on scrub oak control, timber stand improvement work, industry location data, markets, etc. Commission foresters handled an estimated 1,200 telephone calls regarding insect and disease control and made more than 490 on-the-ground inspections for insects and disease. Recommendations for control were given in each case.



Field foresters of the Commission are responsible for checking all areas where landowners request forest practices to be carried out on their property under the Agricultural Conservation Program. In 1966-67 a total of 1,338 landowners accomplished one or more forestry practices under the Agricultural Conservation Program. A total of 1,251 field checks were required and made by Commission field foresters.

Commission foresters were able to service requests for assistance with only one to four weeks delay, except in the Pee Dee section of the state where a tremendous number of requests were received. Additional personnel is needed to keep up with requests and to promote new work.

There was a slight decrease in ACP requests. However, a substantial amount of forest management work was accomplished with the aid of this program.

A forester was added to the central office forest management staff as a utilization and marketing specialist. He will assist forest product operators in better utilization and marketing techniques and work with Commission field foresters on utilization and marketing problems.

CONSULTING FORESTER ACTIVITY

Commission and Extension foresters continued to follow the practice of referring all larger jobs to consulting and industry foresters wherever practical. Our records show 251 jobs referred to consulting foresters and 48 jobs referred to industry foresters during the year after properties were examined by Commission or Extension personnel. It is estimated that more than 75 jobs were referred to consulting foresters through contact with Commission and Extension foresters but where no field work was done by Commission personnel.

UTILIZATION AND MARKETING

Sawtimber and Pulpwood Stumpage Prices for South Carolina Five-Year Period*

Fiscal Year	Weighted average stumpage price per M board feet Scribner Tree Scale	Weighted average stumpage price per standard cord
1962-63	\$32.89	\$6.24
1963-64	32.05	6.60
1964-65	34.89	6.88
1965-66	35.00	7.17
1966-67	35.76	7.06

* Sales of timber marked by Commission foresters on private property.

Sawtimber and pulpwood prices remained steady during the year. Quality hardwood was much in demand for sawtimber and veneer. Exact figures are not available on sawtimber production. However, the estimated production figure is up from 1965.

The construction of a new pulp and paper mill at Beech Island will provide additional markets, especially hardwood, for South Carolina timber growers.

There was no increase in the number of sawmills in the state during 1966-67. Some of the existing mills made improvements, both in quality and quantity of manufactured items. Much of this effort was toward better and larger equipment aimed at increased production with little increase in labor requirements.

The Commission has started a more intensive program in utilization and marketing. It has added a position in utilization and marketing in the Management Branch. The forester in this position works with forest products operators, loggers, and woodland owners, assisting them with their marketing and utilization problems.

The trend in forest management continues to be toward shorter rotations and quicker returns. The objective of the forest management landowner assistance program is to help guide private landowners to manage their woodlands so the highest financial returns can be obtained over a long period of time.

Most large landowners and forest industries are now using good management practices on their own land. Many have hired full or part-time foresters.

WATERSHED PROJECTS

A program to control water on the small watersheds and to protect bottomlands along the smaller streams from overflow was initiated some years ago through Public Law 566. The State Commission of Forestry has the responsibility of providing needed forestry assistance under agreement with the U. S. Forest Service. There were 13 Public Law 566 projects in operation in the state.

Preliminary examinations have been made on 60 separate areas to determine the feasibility of beginning new watershed improvement works on these areas.

A description of some of the activities accomplished on the 13 areas of operation follows.

BIG CREEK WATERSHED PROJECT

This was the fourth year's operation for this project. Fifteen acres of critical area have been planted to pines. Another 87 acres have been planted for watershed protection by private landowners. Three woodland examinations were made covering 70 acres. Brush dams and mulching have been done on 26 acres to stabilize gullied areas before tree planting.

DUNCAN CREEK WATERSHED PROJECT

This was the fourth year's operation for this project. Some 56,000 loblolly pine seedlings were planted on 66 acres of critically eroding land. In addition, 262 check dams, with love grass, were constructed to stabilize the soil on 27 acres. Other tree planting amounted to 141 acres, bringing the total planted during the four years' operation to 1,273 acres. Two woodland plans were made covering 1,794 acres.

GEORGE'S CREEK WATERSHED PROJECT

This was the first year's operation on George's Creek Watershed which is located in the eastern part of Pickens County northeast of Easley. Trees were planted on 164 acres of critical area. Fertilizing, mulching and planting grass were done in conjunction with building 848 brush dams on 31 acres of the critically eroded area. Landowners planted an additional 8 acres for watershed protection. Woodland examinations were made at the request of ten landowners on 1,034 acres of woodland.

THICKETY CREEK WATERSHED PROJECT

This was the fifth year of operation for this project. Critical area tree planting was accomplished on 207 acres. Other planting amounted to 240 acres. Erosion control work such as check dams and love grass planting was carried out on 702 acres. A total of 840 brush dams were constructed. Nine woodland examinations and plans were made covering 785 acres of woodland.



This area was typical of many thousand acres of watershed projects in South Carolina's piedmont section. On many of them brush dams, love grass and trees have helped to heal nature's wounds.

During the five years of operation, 816 acres have been planted to trees for watershed protection, 944 acres have been planted on critical areas and management advice and recommendations given to 158 landowners covering 7,852 acres.

THREE AND TWENTY WATERSHED PROJECT

This was the third year for operation of this project. Sixty-five acres were planted to pine trees for flood prevention. There were 1,059 brush check dams with love grass made on 34 acres of the worst eroded areas. An additional 80 acres were planted for watershed protection by landowners. Twenty-two woodland examinations covering 1,125 acres were made by the project forester.

WILLOW SWAMP, WILSON CREEK, MITCHELL SWAMP- PLEASANT MEADOW, FISHING CREEK, MAPLE SWAMP, HORSE RANGE SWAMP, LYNCHES LAKE- CAMP BRANCH WATERSHED PROJECTS

These watershed projects have no critical area tree planting or gully control work planned. They are active because of the need of tree planting for watershed protection and intensified woodland management. Commission foresters made thirty woodland examinations on 2,075 acres in these watersheds. Also, landowners planted some 572 acres for watershed protection and did hydrologic stand improvement work on 4,761 acres of existing woodlands.

COMPLETED WATERSHED PROJECTS

Since the first watershed project was authorized in July 1953, eight projects have been completed. Great strides were made in stabilizing the soil in seriously eroded areas and establishing permanent ground covers. Trees, love grass, brush dams, and mulching were used to check runoff. Projects which have been completed are: Twelve-Mile Creek Pilot Watershed, Pickens County; Coneross Creek Watershed, Oconee County; Wateree Creek Watershed, Fairfield County; Beaverdam Creek Watershed, Edgefield County; Brushy Creek Watershed, Anderson and Pickens Counties; Broadmouth Creek Watershed, Anderson County; Hills Creek Watershed, Chesterfield County; and Huff Creek, Greenville County.

STATE FORESTS

Cassatt State Forest	462 acres
Harbison State Forest	2,202 acres
Manchester State Forest	28,830 acres
Sand Hills State Forest	92,000 acres
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TOTAL	123,494 acres

Prior to acquisition by the state, most of the land included in the state forests had been heavily cut over and generally misused. The primary effort since acquisition by the state has been directed to building up the growing stock in existing forest stands and planting the submarginal old fields to desirable species of forest trees and developing an adequate wildlife management program.

Through an intensified scrub oak eradication program, much of the land on state forests needing this treatment has been covered. The remaining acreage needing clearing and planting will be cleared as demonstration and experimental areas (at the rate of 200-500 acres per year) in the testing of new herbicide chemicals and improved mechanical methods of preparing scrub oak land for planting. Approximately 39,563 acres of scrub oak land have been cleared and replanted to pine since acquisition by the state. Improvement cuttings, thinnings and salvage cuttings were made for both sawtimber and pulpwood from the forests. All cuttings were designed to improve both growth rate and quality of the remaining timber.

The 1960 General Assembly passed an act enabling the Commission to use receipts from the state forests to speed up reclamation of scrub oak lands. This program enabled the state to clear approximately 5,000 acres during 1960-61; 5,949 acres in 1961-62; 5,893 acres in 1962-63; 6,163 acres in 1963-64; 3,397 acres in 1964-65; and 1,883 in 1965-66. This program was completed in May 1967. All large areas in need of such treatment have been cleared and planted. Smaller and more isolated areas still exist however, and plans are being made to utilize these areas for the testing of new mechanical and chemical means of scrub oak control so that the best of these methods can be reliably recommended to South Carolina landowners.

DEMONSTRATIONS AND MEETINGS

Several large group meetings were held at the state forests to show some of the results of research and experimental work. In addition, a large number of individuals and small groups visited the areas to observe methods and results of scrub oak reclamation to productive forest land.



Research and experimental work on state forests have found the way as vast acreages on the forests and private lands have been converted from scrub oak to pine production.

PAYMENT TO COUNTIES

Twenty-five percent of the gross receipts of all state forest operations are paid to the counties in lieu of taxes. This year's payments to counties were as follows:

Chesterfield (Sand Hills State Forest)	\$ 47,882.08
Sumter (Manchester State Forest)	31,793.75
Richland (Harbison State Forest)	98.10
Darlington (Sand Hills State Forest)	286.58
Kershaw (Cassatt State Forest)	682.50

In the past 10 years the Forestry Commission has paid a total of \$570,793.37 to counties where state forest lands are located as follows:

Chesterfield	\$362,948.86
Sumter	256,050.34
Richland	30,359.24
Kershaw	1,579.86
Darlington	598.08

Most of the Commission's research efforts were through cooperative studies with either Clemson University or Southeastern Forest Experiment Station.

CASSATT STATE FOREST

The area comprising this forest lies about two and one-half miles north of Cassatt, S. C. It was deeded to the state by J. R. West on May 28, 1935.

A CCC Camp was located there and a fire tower and dwelling for the towerman were erected. Also, pine seedlings were planted.

Sand Hills State Forest personnel have established and maintained a system of boundary firebreaks. Breaks have also been plowed around plantations and along the public road which crosses this property, and all boundary lines have been permanently marked. A pulpwood sale of 248 cords was made on a 30 acre portion of this forest. Fifty acres were planted to longleaf pine and 38 acres were prescribe burned for weed tree control.

Almost all of this forest is now in production and only a small amount of timber stand improvement work is needed to maintain a good state of production.

HARBISON STATE FOREST

Harbison State Forest, containing 2,202 acres, is located in Richland County. The Richland County fire control organization is responsible for fire protection and is assisted by the caretaker, Mr. Roof Lowman. No fires burned on the forest during the year.

Most of the Harbison area is well stocked and is in good growing condition. A planned system of cutting and improving

the stand and maintaining rapid growing conditions is in effect. During the 19 years that the state has owned this property, receipts from the property have paid for the land purchase price plus interest and all operating costs and have returned a substantial amount to the state treasury. No forest product sales, other than trees salvaged to widen highway, were made this year as the highway (No. 76) over which these products would have to move is under renovation. An increased sale for the coming fiscal year is proposed.

MANCHESTER STATE FOREST

The 28,830 acres of land making up Manchester State Forest are located south of Wedgefield in Sumter County. From 1939 to 1955 this land was leased to the S. C. State Commission of Forestry on a long-term lease from the federal government. The state received fee title to this property on June 28, 1955. Approximately 8 percent of this forest is still in an unproductive state. On this area the major silvi-cultural activities are being directed. Most of the old fields except those being farmed have been planted. The clearing of scrub oak lands and planting to pine has been completed this fiscal year, with the exception of small demonstration areas.

Six hundred acres of land were rented for agricultural purposes during the year. Some of the tenants renting this land work part time on the forest.

In addition, 45 acres of newly-cleared scrub oak land were rented for one season.

GAME MANAGEMENT

An intensified program of game management has been introduced in cooperation with Sumter Game & Fish Association. In addition to utilizing "waste acres" under power lines, permanent wildlife fields and food patches have been established. A special wildlife budget of \$6,100 was set up to further fish and game production on this forest. This fiscal year receipts from hunting and fishing permits totaled \$5,938.25 and at the ever increasing use it is expected that these receipts will exceed the expenditures in another year.

Work begun on dam repair and raising the level of Elliott's Pond; Christmas Pond dam repair is scheduled for the winter of 1967-68.

Of the 5,861 permits sold, 1,245 were for deer hunting. Only 54 deer were reported taken although the area is rated as very good. During the year 1,060 dove permits were sold, most of those for the first 3 hunts and hunter success was high. The number of fishing permits almost quadrupled indicating a great intensification for pond fishing. Quail hunting accounted for 948 permits, success was variable depending on knowledge of the area and ability of the dogs.

Tree Planting:

A total of 500,000 trees was planted on the forest during the year consisting of 169,000 slash, 311,000 longleaf pine, and 20,000 hardwoods.

Forest Products Sold and Other Receipts, 1966-67:

Sawtimber—1,701,479 board feet	\$68,591.12
Pulpwood and posts—3,862 cords	35,700.73
Rentals, leases and miscellaneous	22,819.40
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TOTAL RECEIPTS	\$127,175.02

Silvicultural Practices:

With the aid of funds made available by the 1960 Legislature, the major job of reclaiming scrub oak lands proceeded on schedule. One hundred and five acres were cleared by root raking and 365 acres were plowed. Of the 105 acres cleared and plowed, 50 acres were cleared of stumps in preparation to use this area for the progeny testing of superior trees produced by the Forestry Commission nurseries. The total area cleared of scrub oak and planted to pine on this forest is now 8,776 acres. One hundred forty-five acres were treated with mist blowing, 145 acres treated for hardwood control by other methods and 900 acres prescribe burned.

Monthly checks were made for insect and disease damage. Research in cooperation with the Southeastern Forest Experiment Station is being continued. *Fomes annosus*, a root rot disease, is taking an increasing toll of timber, especially in the slash pine plantations. Studies of how to combat this problem continue.

Shaw Air Force Base Lease:

The U. S. Air Force has leased approximately 8,000 acres of the Manchester State Forest as a target range to train jet pilots in air-to-ground gunnery. According to the Air Force, damage will be confined to a few hundred acres.

SAND HILLS STATE FOREST

Sand Hills State Forest, located in the scrub oak–longleaf pine type in Chesterfield and Darlington Counties, consists of 92,000 acres. Half of this area is administered by the U. S. Fish and Wildlife Service as a wildlife refuge, but the State Commission of Forestry handles fire protection and forest management activities on the entire 92,000 acres. This area is leased from the federal government on a 95-year lease. During the fiscal year 1965-66, receipts from sales and rentals since acquisition exceeded all monies expended by the state on this area. All revenue from this forest, over operating expenses, is now to be expended on the area for further multiple use improvements.

Before the area was acquired by the government it was heavily cut over, badly burned and generally abused. As a result, major activities have consisted of tree planting, fire protection, and other practices aimed at building up the productivity of the land and increasing the forest stand. Through the use of recently obtained forest inventory information the cut and distribution of the various age groups of timber will be regulated.

Tree Planting:

Most of the longleaf was planted on the Fish and Wildlife Refuge portion of the property. Most areas were machine planted, although some hand planting was necessary in rough cleared areas on experimental plots. The total planted on the forest during 1966-67 was 402,000 seedlings, all longleaf pine.

The total planted on the forest since its establishment amounts to 36,364,500 seedlings. Approximately 34,647 acres have been successfully reestablished to pine.

Forest receipts for the year are listed below:

Forest products	\$228,912.11
Watermelon and other agricultural lands and miscellaneous receipts	10,333.30
Hunting permits	2,565.00
Miscellaneous	2,201.18
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TOTAL	\$244,011.59

Recreation:

The Sugar Loaf Mountain Recreation Area has been re-opened after erosion control measures were taken. The area around the lake continued to receive heavy use. Besides the naturally formed Sugar Loaf Mountain, which is about 150 feet high, there are picnic shelters, a lake, fireplaces, a flowing well, parking areas and latrines. The 15 Boy Scout Troops located in Chesterfield County use this area and facilities for overnight camping. The District Boy Scout Camporees are also held on the area.



Dove hunts have become more popular in state forests as people come from all over the state, especially on opening day.

Fish and Wildlife:

Hunting and fishing is conducted in season by permit on the forest area. Close cooperation by the Commission of Forestry, the State Wildlife Resources Commission and the U. S. Fish and Wildlife Service prevails. Deer, dove and quail food patches are planted and maintained by the Commission of Forestry.

Fishing is allowed in Sexton's Pond, Sugar Loaf Mountain Lake and Campbell Lake. Two newly constructed ponds, Goose Pond and Griggs Pond will be opened for fishing in approximately two years. Two additional ponds are under construction.

Dove, quail and squirrel hunting were permitted on the state forest portion of the Sand Hills State Forest. Permit sales totaled 1,531 for doves; 87 for squirrel; and 267 daily and 68 season permits for quail. All permits were \$1.00 each except the seasonal quail permit which sold for \$10.00.

FOREST INSECT AND DISEASE CONTROL ACTIVITIES

The Commission of Forestry cooperates with the State Crop Pest Commission in a forest pest detection system. Currently the system involves reporting insect activity on permanent observation areas and casual reports of insect and disease activity of significance. Two observation areas are checked periodically in each county, one for pine bark beetle activity and the other for pine tip moth activity. The observation reports provide a systematic buildup of data on pest occurrence, damage and the relationship of the woodland environment to the pest. Twenty-eight non-technical rangers assist Commission foresters in making the periodic checks of observation areas and reporting pest activity. Industry foresters also cooperate by reporting "casual observations" of significant insect or disease activity.

To supplement observations made by field personnel an abbreviated aerial survey was made through 33 counties in the state from June 19-26, 1967. The survey was designed to observe some of the large private woodland holdings not usually observed from the ground. Very little insect activity was found at these spots by foresters making "ground checks."

Bark beetle populations were low during the fiscal year on private land. Very little control action was needed and applied.

The U. S. Forest Service reported that southern pine beetle populations had begun to show a marked increase on the Sumter National Forest in late June 1967. A beetle control program was planned for the central piedmont districts of the Sumter National Forest and all districts on the Francis Marion National Forest.

A pine seedling debarking weevil survey was conducted during September-November 1966 and April-May 1967. The purpose was to determine if the pales weevil and pitch-eating weevil were in significant populations on burned and cut over areas. Foresters were concerned that these weevils might destroy pines planted on the areas damaged by fires during March and April, 1966. Only 5 of the 38 areas sampled showed a significant population of weevils in the fall. The spring survey did not reveal a significant population on any of the areas. Seedling survival checks on these areas indicated only minor loss to the weevils. The survey tended to substantiate previous reports that weevils are not a threat to planted pines if the previous stand was cut or killed at least 6 months prior to planting.

Commission foresters made approximately 490 field checks for insect and disease damage. Recommendations were given the landowners regarding treatments necessary to control or check the spread of the forest pest. Many additional requests were handled by telephone where a field check was not necessary.

NURSERIES

The four forest tree nurseries produced and distributed to landowners 48,575,190 seedlings for planting during the 1966-67 planting season. An additional 21,022,400 seedlings were either produced or brought into the state by others. The cost of seedlings grown at Commission nurseries was \$4.50 per thousand f.o.b. nursery or \$5.50 if the seedlings were shipped to landowners.

The demand for seedlings increased during the year with a total increase in seedlings planted from all sources of 13,068,405. Seedling sales from Commission nurseries were 6,264,505 more than for the 1965-66 fiscal year. It is antici-

pated that seedling sales will remain at the present level during the 1967-68 planting season. Since 1928, a period of some 39 years, 1,487,385,119 forest tree seedlings have been planted in South Carolina.

FOREST TREE NURSERY ACTIVITIES

The four forest tree nurseries operated by the Commission are: Horace L. Tilghman (near Wedgefield in Sumter County); Piedmont (near Sunset in Pickens County); Coastal (near St. George in Dorchester County); and Ridge (near Trenton in Edgefield County).

Distribution of Seedlings:

During the year a total of 69,597,590 forest tree seedlings were distributed. Of this total 48,575,190 were produced in the four state nurseries. Out of state plantings of state nursery produce seedlings amounted to 1,522,150.

Nursery production by species was as follows:

Loblolly Pine	26,097,818
Slash Pine	19,351,150
Longleaf Pine	1,460,003
White Pine	631,900
Red Cedar	280,150
Yellow-Poplar	224,750
Miscellaneous	529,419
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Total	48,575,190

Seedlings brought into the state by landowners or produced in the state by industry nurseries totaled 21,022,400.

Tables 9 and 10 in the appendix are a record of seedlings distributed by counties and class of ownership. Table 11 shows the total acreage planted by counties and acres in need of planting.

The following table records the number of seedlings distributed in South Carolina by years, including out-of-state seedlings:

YEAR	TOTAL DISTRIBUTED (State Nurseries)	TOTAL DISTRIBUTED (Inc. Other Sources)
1928-29	142,000	142,000
1929-30	148,000	148,000
1930-31	986,000	986,000
1931-32	976,000	976,000
1932-33	996,000	996,000
1933-34	1,031,000	1,031,000
1934-35	7,529,000	7,529,000
1935-36	23,000,000	23,000,000
1936-37	22,000,000	22,000,000
1937-38	11,192,000	11,192,000
1938-39	10,854,000	10,854,000
1939-40	12,244,000	12,244,000
1940-41	21,165,423	21,165,423
1941-42	10,275,037	10,275,037
1942-43	4,742,010	4,742,010
1943-44	5,662,608	5,662,608
1944-45	1,926,840	1,926,840
1945-46	6,402,255	6,402,255
1946-47	1,962,600	1,962,600
1947-48	11,356,990	11,356,990
1948-49	30,338,775	30,338,775
1949-50	29,501,955	29,501,955
1950-51	20,615,315	20,615,315
1951-52	16,619,000	16,619,000
1952-53	22,035,850	32,246,298
1953-54	36,210,100	42,852,314
1954-55	35,373,025	45,182,255
1955-56	34,413,550	42,931,755
1956-57	55,753,600	69,658,736
1957-58	60,846,200	93,369,084
1958-59	123,985,000	166,351,000
1959-60	147,146,365	187,516,418
1960-61	145,609,075	158,330,575
1961-62	71,892,420	83,844,470
1962-63	56,191,241	64,201,541
1963-64	51,445,597	62,423,597
1964-65	49,009,893	60,683,493
1965-66	42,310,685	56,529,185
1966-67	48,575,190	69,597,590
TOTAL	1,429,492,619	1,487,385,119

Forest Tree Seed Collection:

Each year the Forestry Commission collects cones to obtain seed for tree seedling production. The field offices locate private collectors in good seed producing areas to obtain the quotas which are set. This year cones and seed were collected as follows: longleaf pine 3,243 bushels; loblolly pine 2,300 bushels; black walnut 134 bushels; redcedar 243 pounds; and sweetgum 5 bushels.

The seed extractory was operated for the tenth year with continued good results. The average cost of seed to the state since the operation of the seed extractory is \$1.64 per pound compared to \$3.00 to \$5.00 per pound if the seed was purchased from commercial dealers.

Seedling Survival Examination:

After seedlings are outplanted one year by landowners, approximately 10% of the seedlings planted in each county are



Forest tree improvement work continues as 100 of the 150 acres of seed orchards planned have been established.

sampled to determine the over-all state survival rate. Through these examinations, the Forestry Commission can determine reasons for any failures and recommend steps to eliminate future plantation failures. This year the over-all state seedling survival rate was estimated at 67% compared to 72% for the previous year.

Research:

Research activities in cooperation with Clemson University were continued. Three projects dealing with seed source studies were continued. Two of these studies are concerned with developing better Christmas tree seedling stock. One study is concerned with control of disease in redcedar seedlings.

Forest Tree Improvement:

The forest tree improvement program made further progress toward establishing 150 acres of seed orchard. A total of 6,700 grafted plants has been planted in the Burnt Gin Seed Orchard and 2,700 grafted plants have been planted in the Coastal Seed Orchard. Of this total, 2,931 plants were established during the fiscal year.

During March and April 1967, 3,828 new grafts were made at the four nurseries on rootstock in nursery seed beds. The grafts made this fiscal year should complete 100 acres of seed orchard and expand our slash orchards by 12 acres.

The selection of superior trees was continued. A total of 11 superior trees was graded and approved for orchard use during the year. Since the tree improvement program was initiated, 137 trees have been graded.

The Forestry Commission is a member of the North Carolina State University-Industry Tree Improvement Program. Membership in this program makes available the services of forest geneticists who provide the technical services which are necessary in a tree improvement program.

Anticipated 1967-68 Seedling Production:

Planned production of seedlings for the 1967-68 planting season is approximately 51,000,000. Species for distribution will include loblolly, slash, longleaf, shortleaf, Virginia pine, white pine, yellow-poplar, black walnut and redcedar.

State Parks

PAST, PRESENT, AND FUTURE

June 30, 1967 marked the close of a 33-year period during which a system of state parks was conceived, developed and operated by the S. C. State Commission of Forestry. Effective July 1, 1967 the Division of State Parks was transferred to a newly-created state agency, the Department of Parks, Recreation and Tourism.

The 1934 General Assembly charged the State Commission of Forestry with the responsibility of establishing a state park system with the mandate: "The State Commission of Forestry may control, supervise, maintain and wherever practicable improve all parks belonging to the State for general recreational and educational purposes."

The establishment and development of a statewide system of state parks is a little known chapter of South Carolina's phenomenal modern-day growth and progress. This, therefore, is an appropriate time to look back, and to look ahead to consider both the past and the future role of state parks in South Carolina.

Thirty-three years ago there was nothing. Today you can drive the family car into many beautiful state parks, from the rolling hills of the Blue Ridge to the sparkling sands of the Atlantic, and from east to west across the wooded middle country in between.

Land and trees and rocks and water—everything a generous Mother Nature had to offer—were coordinated and utilized these past three decades to provide South Carolinians, and the many, many outsiders who visit us, with nearly 50,000 acres of scenic and recreational wonderlands through which much of our state's proud history has been etched in marker and stone.

The public's appetite for outdoor recreation is enormous, however, and even with its amazing progress South Carolina's state park system was hard-pressed to keep pace. The park system exceeded its developed capacity years ago, and yet thousands of people flock to these havens of rest and natural beauty every year.

Many of the additional visitors could not be accommodated. Often there were not enough family campsites, cabins, picnic



In their quest for outdoor recreation South Carolinians and visitors from out-of-state have flocked to state parks in numbers that far exceed their developed capacity.

tables, playgrounds and other physical facilities. Every existing park should be substantially expanded in usable area, operational buildings and other facilities. Additional personnel are urgently needed just to take care of the current overflow.

Sorely needed also are major NEW parks in such places as the big water impoundments, Lake Murray, Lake Moultrie, Hartwell and Clark Hill, on the Wateree and in the fast growing Pee Dee area. All these are near centers of population which are not now adequately served by state parks, and all have tremendous natural potential. These developments, taking full advantage of the rich land and water resources present everywhere, would go a long way toward meeting our present day recreational exigencies.

The Chesterfield Folks Started It

The beginning of our park system was in Chesterfield County, four miles south of Cheraw, in 1934. Donations from far-seeing citizens there purchased 706 acres of sub-marginal



Citizens donated the money to buy 706 acres and the federal government leased additional lands to the State Commission of Forestry as the first land for a state park in South Carolina was acquired at Cheraw.

land, and the State Commission of Forestry negotiated a lease with the U. S. Government which increased the holdings to 7,361 acres.

Young men of the Civilian Conservation Corps were put to work building, clearing, and Cheraw State Park became the first in the system. It is still the largest, and the most completely developed.

The public took notice, and in the same year the State Commission of Forestry was authorized by the Legislature to "accept gifts, donations and contributions of land suitable for park purposes and enter into agreements with the federal government or other agencies for acquiring by lease, purchase or otherwise such lands as in the judgment of the Commission are desirable for state parks."

Progress was swift from that point on. Organizations, government units and public-spirited citizens provided one property after another. The emergency relief programs, the CCC in particular, were just what was needed to begin the work that was to make South Carolina's state park system one of the undisputed best in the country.

Aiken, Myrtle Beach and Poinsett

Aiken County people came up quickly in 1934 with 1,067 acres, and Aiken State Park was born. The Myrtle Beach Farm Company donated 312 acres right on the ocean—and a camping and fishing site that has welcomed millions of visitors since, the very popular Myrtle Beach State Park, was started. It was the first South Carolina state park to open to the public.

Sumter County donated a thousand acres along the great Wateree Swamp and a park named after South Carolina's noted naturalist and statesman, Joel Roberts Poinsett, was laid out.

(Right here we'd like to try and illustrate the delightful surprise which faces a traveler who decides to visit many of our parks. The country around Poinsett State Park is average flat farm land; little of scenery or interest. You may be driving along S. C. 261 from Manning over to the Columbia-Sumter highway, and come to a sign marking the entrance to the park. You may not be tempted to enter, but enter anyway



The Myrtle Beach Farm Company donated 312 acres of ocean-front property and on it was established Myrtle Beach State Park—the first South Carolina state park opened to the public.

—and you'll suddenly come upon a spot of such startling natural beauty you'll hardly be able to believe your eyes. Inspect further, and you'll find some of the most interesting geology and plant life in the state).

From Charleston to Kings Mountain

Then, before that first eventful year of 1934 was up, the Charleston Water Works deeded 1,235 acres on historic Edisto River in Dorchester and Colleton Counties for Givhans Ferry State Park. This is the spot from which the city of Charleston gets its water supply, via a tunnel cut through blue marl. Late in that year, the federal government leased 6,141 acres in York and Cherokee Counties for Kings Mountain State Park, and that picturesque area now adjoins the Kings Mountain National Military Park. Two large dams were built of rock quarried from the area forming two heavily used lakes.

Hardly had 1935 appeared on the calendar before Chester State Park was in the making with 523 acres of donated

barren land which is now in a beautiful well forested area. The state acquired 1,255 acres on the coast of Edisto Island, and Charleston County was in the state park business with one of the most scenic and pleasant of our seashore areas. Donations established Lee State Park with 2,839 acres; Oconee State Park with 1,165 acres; Paris Mountain State Park of 1,275 acres; and the now nationally known Table Rock State Park of 2,860 rolling hill country acres—all of them scenic, all abounding in wildlife and wild flowers, all geologically interesting.



Table Rock State Park was established on one of the most unique areas South Carolina affords.

After a lull in '36, little Barnwell County came up with 307 acres for a state park, and the Columbia Sesquicentennial Commission bought and gave the state 1,500 acres of choice pine land just 11 miles northeast of the Capitol for the extremely popular and well-used Sesquicentennial State Park.

Greenwood State Park was soon situated on the Saluda River power impoundment known as "Buzzard Roost," donated by the county for recreational use. Beaufort County

chipped in with 5,000 subtropical acres on Hunting Island, a state park with great potential but threatened with a serious and still present erosion problem.

A Glittering Seven-Year Start

What a beginning, in seven short years! Sixteen state parks, 34,680 acres! Many hands were busy. Thousands of dollars from emergency relief funds, labor of CCC camps, and land gifts from the government, counties, private enterprise and other groups, and individuals.

Santee State Park of 2,764 acres, on the waters of Lake Marion, famed for its land-locked striped bass, came along during World War II. The Rivers Bridge Confederate Memorial Association donated its historic 390-acre battleground for a state park. A few years later, the state acquired 7,088 acres of government surplus holdings near Spartanburg for Croft State Park. In 1950, the Pleasant Ridge State Park north of Greenville was laid out over 300 scenic acres.



The wide and inviting beach at Huntington Beach State Park is a part of the 2,500 acres made available by Mrs. Anna Hyatt Huntington and the Brookgreen Gardens Trustees in 1960.

The Little Pee Dee State Park was next, in 1952. It has 835 acres—and has already become a mecca for red-breast fishermen. In 1953 the history-conscious people of Lancaster County donated 360 acres for Andrew Jackson State Park, birthplace of our seventh President.

Finally, in 1960, Mrs. Anna Hyatt Huntington and the Brookgreen Gardens Trustees turned over to the state some 2,500 acres of land along the Atlantic coast, and in honor of the world-famous sculptress and her husband, Archer M. Huntington, the area is known as Huntington Beach State Park. It is destined to be one of our most heavily used areas.

Rounding out our system, there are such smaller areas as Colleton Wayside Park on the Edisto River; Campbell Lake State Park in Sand Hills State Forest, operated in conjunction with Cheraw State Park; Mill Creek State Park in Manchester State Forest, operated in conjunction with Poinsett State Park; and seven historical sites of state significance and national interest, as follows:

Eutaw Springs Battleground; Fort Watson Battle Site and Indian Mound; General Francis Marion Burial Site; Old Dorchester Town Site; the Governor Gist Mansion, "Rose Hill"; General Thomas Sumter Burial Site; and Colonel Isaac Hayne Burial Site.

For these 33 scenic and natural areas, the contributions of government, cities, counties, holding companies and individuals have been so liberal that only the Croft properties had to be purchased by the State, and they at only 50 per cent of fair value, with an assist from Spartanburg County.

The latest addition to South Carolina's state parks are the 1,290-acre Baker Creek State Park on the Clark Hill Reservoir in McCormick County, and the 394-acre Sadlers Creek State Park area on Hartwell Reservoir in Anderson County. These areas, being developed as state parks under lease license from the Corps of Engineers are destined to become major units in South Carolina's state park system, providing outdoor recreation opportunities for South Carolinians and visitors from other states.



Fort Dorchester, which was used during the Revolutionary War, and the tower of the Anglican Church of St. George, which has been restored at Old Dorchester Historical State Park, are examples of historical areas acquired and administered by the Division of State Parks.

What The Future M-U-S-T Bring

When we look back over the 33 years of the state park system, it seems half real, half miracle, the way it came to us and the way it grew. The people can feel proud, and they ought also to feel lucky. Most of it was given to us.

But even while feeling good about the past, South Carolinians must become fully and quickly conscious of the problems which lie immediately ahead. Our own population is exploding, as everywhere. Additional thousands of people from other states, most of which do not have the natural resources and grand mountains-to-sea scenery that we do, are driving in to see us each year. In fact, these people are just now beginning to hear what a pleasant place South Carolina is, and there isn't any doubt that they will be coming in larger numbers all the time, and staying longer. However, we must be in a position to meet their needs, and the competition of other states.

New industry arrives every week. (Who can tell: a nearby state park, which its employees can visit with their families and find outdoor recreation, peace and relaxation, might be a principal reason why a plant would locate in South Carolina and not elsewhere).

South Carolina has absolutely everything needed for a park system second to none: resources in abundance, natural beauty, and cultural and historic wealth on which we have never capitalized. Mountains and meadows and marsh; rivers and harbors; hundreds of square miles of picturesque inland waters in addition to the ocean itself; offshore islands just now in their early stages of development; mile after mile of wide, safe beaches; great forests; great natural and impounded lakes; and a plant life that stays largely green in winter-time. Everything except sufficient state park facilities to meet the ever growing demand.

And opening up all this to the millions of tourists in the north, the west and the vast land-locked midwest is our excellent network of freeways, reaching in every direction.

So, we have the natural resources, and the roads. We have also the increasing population; a potentially tremendous tourist business a-building; new industry coming continuously. And, the people have more and more leisure time on their hands, shorter work weeks, longer vacations.

These resources must be developed, and rapidly. New parks will fill up with people as fast as they are built. Existing parks need to be expanded to full capacity, and they need new and additional facilities to take care of the people already using them.

Funds available on a matching basis by the Federal Land and Water Conservation Fund Act for the acquisition, planning and development of outdoor recreation—can be utilized to expand and develop South Carolina's state park system to meet the demands, the opportunities, the challenges that lie ahead.

Other states, including our neighboring states are utilizing this opportunity and are even now spending millions of dollars on outdoor recreation. They expect it to be one of their best investments. In support of both our economy and our needs, can South Carolina afford to do less?

The South Carolina State Commission of Forestry, in relinquishing its stewardship of the state park system can look back on a firm foundation of state park development established over the past 33 years. It also looks forward hopefully and confidently to a most promising future for South Carolina state parks under the leadership of the new Department of Parks, Recreation, and Tourism.

State Parks

SUMMARY

Acting on authority granted by the 1966 General Assembly, the S. C. State Commission of Forestry re-opened all state parks to full and unrestricted use of all facilities on July 1, 1966. This action resulted in a gradual return to a more normal year of state park use. No incidents marred the year's operation.

Special permission was granted to use funds other than from direct operating appropriations to employ summer personnel to man the swimming areas because these funds had not been included in the 1966-67 general appropriations bill. Funds were later provided by a deficiency appropriation.

The General Assembly made \$256,000 available for a capital improvements program in the first year's development outlined in the Five-year State Park Development Plan. These funds were used on a matching basis with funds from the Federal Land and Water Conservation Fund Act on projects approved by the Bureau of Outdoor Recreation. In this program a park ranger's residence was replaced at Barnwell State Park. A community building was replaced at Chester State Park. A multi-development program including a camping area and picnic area was begun at Croft State Park, with other development projects such as a superintendent's residence and a boat storage facility to follow. A ranger's residence was completed at Givhans Ferry State Park. A camping area enlargement and latrine together with two beach area change houses were built at Hunting Island State Park. A completely new modern fifty-site camping area, a concession-first aid building, and additional picnic facilities including three shelters were completed at Huntington Beach State Park. New facilities, including new restrooms, office and concession building and two new picnic shelters were built in the day-use area at Myrtle Beach State Park. Also included in the development program at Myrtle Beach State Park was construction of a large oxidation pond for sewage disposal at the park. A new addition was made to the Myrtle Beach State Park fishing pier and the parking area was paved. A major development program was started at the new Sadlers Creek State Park on

the Hartwell Reservoir. Included in this development was completion of a superintendent's residence, and layout and preliminary work for a fifty-site camping area. Facilities including grills, picnic tables and parking areas were completed for the picnic area, and new wells were put into operation to supply the facility with water. Other developments included modern facilities for the camping area, and construction of a workshop and picnic area; latrines will follow.

Federal funds from the Land and Water Conservation Fund for approved outdoor recreation projects approved by the Bureau of Outdoor Recreation will materially aid the planned development of South Carolina's state park system.

Attendance

With all parks open and operating unrestrictedly as of July 1966, visitation for the year ending June 30, 1967 showed an increase of 1,020,532 to a total visitor use of 2,693,675. A return to the pre-parks-closing annual visitation of $3\frac{1}{3}$ million is expected in 1968. This use figure is based on the renewed



With the reopening of state parks on an unrestricted basis in July 1966, park use began to climb back to normal, with a heavy demand for family camping.

interest and expansion development which is planned to provide needed facilities for our citizens and to attract and satisfy tourists' recreation needs.

A table showing annual state park use from 1936-37 through 1966-67 is included in this report.

Revenue

Due to the delay until July 1 for unrestricted use of all facilities, annual park revenue did not reach a normal or anticipated amount. Revenue from vacation cottage rentals was materially affected. The total 1966-67 revenue of \$122,591, however, did show an increase of \$80,192 over 1965-66 revenue.

With the public more fully aware of the unrestricted park use policy and with the increase in the number of family campsites, 1967-68 revenue is expected to rise to approximately \$200,000.

Appropriation

The 1966-67 operating budget appropriation of \$410,254 represented an increase of \$41,738 over the 1965-66 operating budget. The Appropriation Bill was passed by the Legislature prior to passage of the Act which permitted the full and unrestricted use of all parks and all facilities, therefore no provisions were made to employ summer personnel to man the beach areas, lakes and pools. A later deficiency appropriation of \$46,131 was granted to handle this situation.

A budget of \$581,637 was requested for the 1967-68 fiscal year. This is a realistic figure for a minimum operation and there are indications from the increased interest in the development of our state parks that this budget request may be approved.

The 1966 General Assembly granted a deficiency appropriation of a requested \$256,000 for permanent improvements in several state parks. Of this amount \$247,150 was carried over for use in the 1966-67 fiscal year. This action proved a stimulus to the state park program. A further capital improvements budget will be requested for the next fiscal year.

Historical Sites

The following state historical sites of major significance are under the direct supervision of the Division of State Parks:

Eutaw Springs Battleground site near Eutawville on Lake Marion is of historical interest as the site of the last important battle of the Revolution fought in South Carolina.

Fort Watson Battle Site and Indian Mound on Lake Marion near the town of Santee is the site of a Revolutionary War Fort which was captured from the British. This site attracts many visitors as it is less than one mile off heavily traveled U. S. Highway 301.

The General Francis Marion Burial Site near the town of Pineville off S. C. Highway 45 is well visited, being the grave site of the nationally known "Swamp Fox".

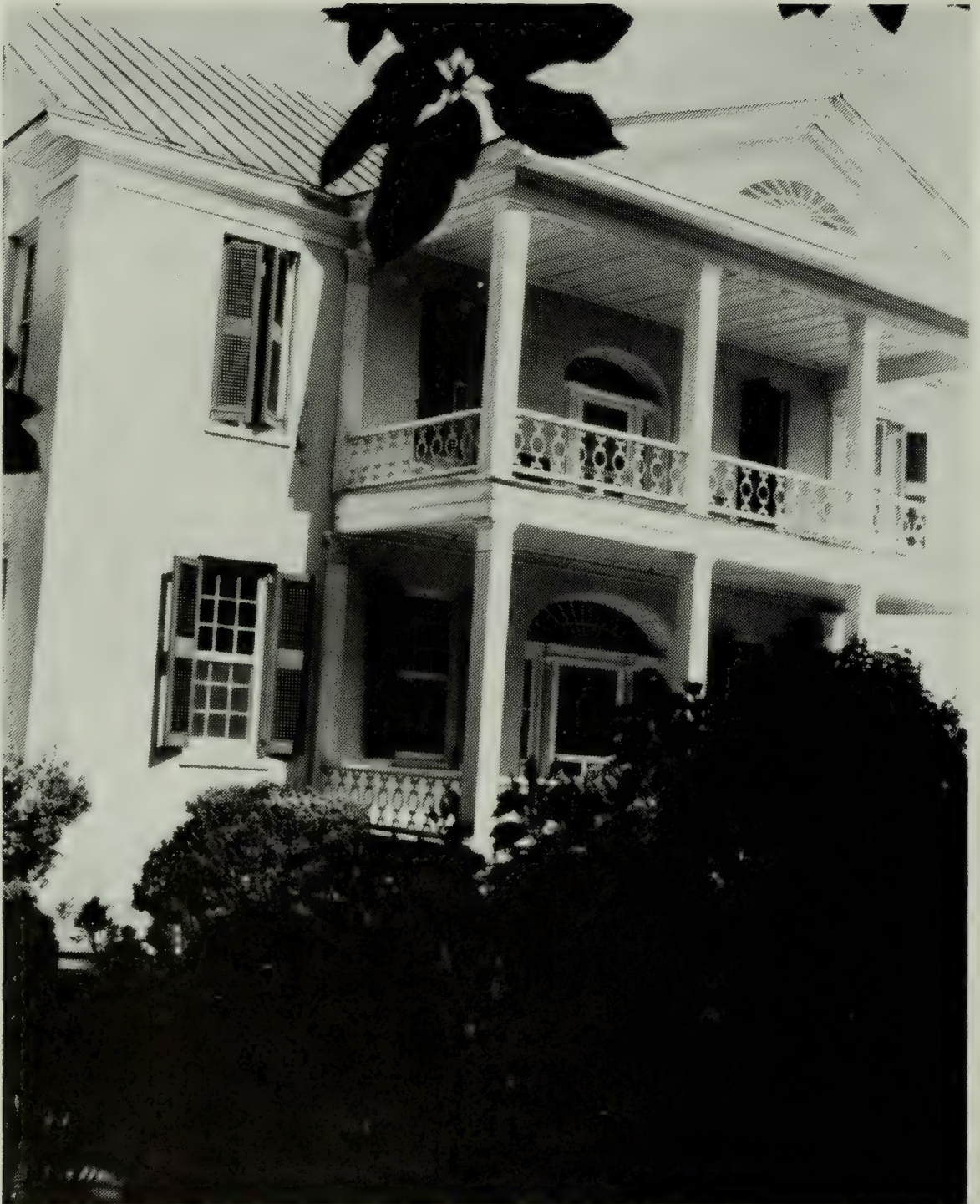
The burial site of Revolutionary War General Thomas Sumter located near Stateburg off U. S. Highway 76 near Shaw Air Force Base is a popular visitor site. Also in the family burial plot is the interesting "Chapel of Ease" marking the grave of the General's daughter-in-law the French Countess, Nathalie deLage Sumter.

One mile north of S. C. Highway 64 and easily accessible from U. S. Highway 17 near the town of Jacksonboro is the grave site of Colonel Isaac Hayne located in the family burial plot of the antebellum home Hayne Hall.

Rose Hill State Park near Union includes the mansion home of South Carolina's Secession Governor, which has undergone extensive restoration and is attracting an increasing number of visitors.

At Old Dorchester Historical State Park on the Ashley River in Dorchester County near Summerville visitors view the old town site and fort.

Andrew Jackson Historical State Park north of Lancaster on U. S. Highway 521 has become one of the state's major historical attractions. The "Block House Museum" exhibits are of particular interest to visitors. One of the main attractions is the larger-than-life size bronze statue of Andrew Jackson the Youth on horse by the famous sculptress Anna Hyatt Huntington. This generous gift to



Rose Hill, the former home of William H. Gist, South Carolina's Secession Governor, is one of the historical sites restored by the Division of State Parks.

the children of South Carolina was unveiled during the 200th birthday celebration of Andrew Jackson on March 15, 1967. Governor Robert E. McNair delivered the principal address at this ceremony.

A modest historical budget of \$22,172 was appropriated for maintenance and supervision of the historical areas for fiscal year 1966-67.

State Park Forest Development Program

A 1965 state Act authorized the Forestry Commission to undertake a seven-year program of scrub oak eradication, timber stand improvement, reforestation and other forestry development work on some 24,000 acres of the more than 48,000 acres of state park lands.

The program is limited to the larger state parks, and is confined to areas not now used or needed in the immediate future for recreational use. The work is being done without impairing the value and attractiveness of the state parks for recreational purposes, and will actually increase the future recreational values of many of the areas.

Revenue from timber harvests will be used to finance the program of reforestation some 5,000 acres and timber stand improvement work on approximately 2,000 acres of state park lands.

Bringing these state-owned lands into full production will yield substantial revenues to the state and the counties. This program will demonstrate how forest lands may be managed for multiple use, including forest products, wildlife, recreation, soil and water conservation and the enhancement of natural beauty.

The receipts from the program are allotted 50% for program operation, 25% to the counties in which state parks are located, and 25% to the state general fund.

FOREST PRODUCTS SOLD: Total receipts from timber sales on state parks during 1966-67 were \$66,669.38, allowing \$33,334.69 for operating expenses, \$16,667.34 to counties, and \$16,667.34 to the general fund as park revenue.

During the 1965-66 fiscal year total receipts were \$62,983.17, allowing \$31,491.59 for operating expenses, \$15,745.79 to counties, and \$15,745.79 to the state general fund.

PLANTING: A total of 262,000 seedlings were planted on 298 acres of four state parks. This included 206,000 slash pine seedlings, 53,000 loblolly pine seedlings, and 3,000 long-leaf pine seedlings.

Since the program began two years ago, 367,000 seedlings have been planted on 423 acres.

OTHER SILVICULTURAL PRACTICES: Site preparation was accomplished on 477 acres of three state parks. Mechanical clearing was done on 397 acres in two operations with the undercutter, one in June and one in August. Fenuron was used to clear 80 acres where low quality hardwoods and brush were too heavy for mechanical means.

The control of weed trees was done on 55 acres on three state parks with tree injectors.

BOUNDARY LINE SURVEY: Surveying of boundary lines was necessary on a number of parks. The following surveying was completed on four state parks:

	<i>Miles</i>
Chester	1.0
Greenwood	5.0
Kings Mountain	6.5
Santee	1.1
	<hr/>
TOTAL	13.6

This surveying was done on areas where boundary lines could not otherwise be determined and where forest management practices could not be carried out until boundary lines were established.

The following tabulation shows timber sales made during the first two years of the forest development program on state parks.

1965-1966 TIMBER SALES

Park & Sale	Purpose of Cut	Acres	Volume		Sale Price
			Bd. Ft.	Cords	
Aiken 3-1	Clear-cut—170 ac.—to be cleared of scrub oak and planted to pine; improvement 14 ac.—good st. growing timber left	184	148,052	199	\$ 4,449.90
Aiken 3-Misc.	Clear-cut—to be planted	3	.....	8	34.08
Chester 3-1	Thinning—excellent stand of growing timber remaining	40	.....	314	3,622.50
Givhans Ferry 3-1	Improvement—excellent growing timber remaining	91	134,239	682	6,630.00
Greenwood 3-1	Improvement—good stand growing timber remaining	185	373,319	540	19,360.00
Santee 3-1	Improvement—180 ac.—good stand growing timber remaining; clear-cut—80 ac.—will be planted	260	284,522	495	13,838.77
Santee 3-2	Thinning—37 ac.—excellent stand growing timber remaining; removal—89 ac.—good stand pine reproduction remaining	126	.....	819	9,142.06
Santee 3-Misc.	Clear-cut—will be planted	3	.....	13	103.36
Sesquicentennial 3-1	Clear-cut—232 ac.—will be planted; improvement—5 ac.; good stand growing timber remaining	237	128,303	143	5,802.50

\$62,983.17

1966-1967 TIMBER SALES

Park & Sale	Purpose of Cut	Acres	Volume		Sale Price
			Bd. Ft.	Cords	
Aiken 3-1	Clear cut—will be planted	2	5,330	3	\$ 137.50
Aiken 3-2	Thinning—good stand growing timber remaining	36	.....	205	1,865.50
Aiken 3-3	Fire Salvage—will be replanted	28	.....	409	2,863.09
Chester 3-2	Thinning—excellent stand growing timber remaining	102	.....	831	9,880.00
Croft 3-1	Fire Salvage—to be planted	94	.....	407	1,996.05
Croft 3-2	Improvement—60 ac.—good stand growing timber remaining; removal—226 ac.—good stand of reproduction remaining; salvage—40 ac.—to be planted	326	230,868	733	10,292.54
Givhans Ferry Misc.	Right of way and house site	...	4,483	9	182.05
Greenwood 3-2	Improvement—good stand growing timber remaining	115	361,854	537	20,268.00
Lee 3-Misc.	Right of way	...	.....	3	19.08
Rivers Bridge 3-1	Thinning—good stand growing timber remaining	57	.....	252	2,470.00
Santee 3-3	Improvement—146 ac.—good stand growing timber remaining; clear-cut—71 ac.—will be planted	217	302,321	537	14,526.00
Sesquicentennial 3-2	Thinning—excellent stand growing timber remaining	33	.....	201	2,110.00
Sesquicentennial Misc.	Right-of-way	...	.....	9	59.57

\$66,669.38

SUMMARY OF STATE PARK USE—JULY 1, 1966 - JUNE 30, 1967

NAME OF PARK	Museum Visitors	Community Building Users	Cabin Occupants	Campers In Group Camps	Campers In Family Camping Area	Other Campers	Boaters	Fishermen	Picnickers	Swimmers	Total Vehicles	Out-of- State Visitors	Total Visitors
Aiken	14,514	.....	.....	.....	805	231	873	1,985	11,240	2,966	9,940	2,546	35,582
Andrew Jackson	4,562	.....	7,826	8,530	23,522
Barnwell	4,867	.....	.....	501	59	16	.....	12,470	1,596	8,606	542	37,442
Cheraw	3,995	.....	10,503	3,419	1,387	538	820	39,723	26,278	26,901	35,221	105,075
Campbell Lake	53	222	1,961	1,965	2,782	1,355	11,689
Chester	645	.....	54	124	9,368	.....	7,281	770	29,124
Croft	891	.....	211	961	1,063	.....	3,858	252	7,631
Edisto Beach	13,262	13,866	8,382	2,190	52,795
Givhans Ferry	1,336	830	.....	2,780	.....	.....	.....	12,450	2,964	8,733	3,868	34,281
Greenwood	11,606	440	6,426	13,241	39,248	1,733	43,145	2,215	176,883
Hunting Island	1,347	.....	20,807	.....	.....	9,584	50,825	78,540	85,065	76,534	340,490
Huntington Beach	976	.....	.....	10,254	12,240	27,873	61,234	45,696	296,788
Kings Mountain	13,367	13,903	1,761	.....	1,119	25,270	5,158	15,426	34,985	62,906
Lee	3,465	.....	.....	901	2,294	.....	3,279	4,419	2,914	7,778	1,507	27,086
Little Pee Dee	4,130	.....	.....	1,279	11,535	3,284	10,376	5,770	29,228
Myrtle Beach	3,536	.....	62,821	.....	.....	24,135	35,237	33,525	156,130	394,190	626,670
Oconee	4,823	.....	2,987	.....	3,119	209	24,905	8,116	13,833	4,393	51,217
Old Dorchester	6,105	1,751	24,524
Paris Mountain	2,511	2,301	1,907	2,711	150	66,328	12,569	43,703	5,422	183,423
Pleasant Ridge	9	.....	67	72	316	175	4,963	39	2,846	799	9,858
Poinsett	3,825	.....	613	2,752	2,343	1,530	3,120	335	16,215	8,869	9,255	2,145	37,020
Mill Creek	190	.....	2,199	16	.....	76	80	1,905	7,968	4,193	2,391	16,794
Rivers Bridge	4,063	2,040	.....	5	2,177	.....	.....	118	3,395	1,596	5,597	3,465	20,051
Rose Hill	3,302	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	361	3,302
Santee	848	.....	5,249	.....	.....	10,004	5,413	3,035	10,999	7,193	43,513

ANNUAL STATE PARK USE—1936-37 to 1966-67

1936-37	227,280
1937-38	478,617
1938-39	494,850
1939-40	584,150
1940-41	830,156
1941-42	1,053,057
1942-43	531,415
1943-44	546,165
1944-45	545,906
1945-46	808,207
1946-47	1,242,633
1947-48	1,562,260
1948-49	1,383,779
1949-50	2,089,712
1950-51	2,578,259
1951-52	3,378,091
1952-53	3,130,694
1953-54	3,207,094
1954-55	3,066,971
1955-56	2,893,996
1956-57	3,248,891
1957-58	3,069,393
1958-59	3,067,679
1959-60	3,181,189
1960-61	3,324,276
1961-62	3,186,416
1962-63	3,306,501
1963-64*	1,846,016*
1964-65	1,432,139
1965-66	1,673,143
1966-67**	2,693,675**
<hr/>	
TOTAL	60,662,610

* Parks were closed September 8, 1963. Parks were reopened June 1, 1964 on a limited basis by Legislative Act.

** Parks were reopened on July 1, 1966 on an unrestricted basis.

Information and Education

INTRODUCTION

South Carolina's 12 million acres of forest land provide an annual return of more than a half billion dollars in growing, harvesting, manufacturing, transporting and sale of forest products. New construction and expansion of the wood using industry increased the basic investment by 125 million dollars during the year.

The needs of our ever increasing population demand that each forest acre produce the maximum amount of usable wood, protect soil and water supplies, and provide for the recreational needs of the citizens of the state.

Every Forestry Commission employee participates in the educational program designed to reach every South Carolinian. Through various means citizens are made aware of their responsibilities to conserve our natural resources so that present and future generations may use and enjoy them to their fullest.

Supporting the state's third largest industry, our forests provide a livelihood for thousands of people. Yet the state's woodlands are producing less than half of their potential. The aim of the Commission's educational program is to help the landowners and people of the state realize the potential value of our woodland and apply the necessary conservation practices that can double the timber production.

Points stressed in the Commission's information and education efforts in promoting wise land use are:

1. Forest fire protection: Some 4,988 (only 44 caused by lightning) illegal woods fires burned during the year in South Carolina, with 99% being caused by people.
2. Unwise cutting practices mean low production and inferior forest products.
3. Trees should be planted on some five million acres of idle or unproductive land.
4. Improve the quality of many existing stands of timber throughout the state by removing inferior species and low grade and poor quality trees.

5. Develop appreciation in the use, protection, and support of South Carolina's state park program to serve the recreational needs of the people of the state.

FOREST FIRE PREVENTION

In the Commission's 1929 Annual Report, Lewis E. Staley, then State Forester, said, "While light burning may not kill the larger trees, unquestionably the basis for future forests—the baby trees—are practically all destroyed. This is an indisputable fact." To this day, it is upon this "indisputable fact," *that even little fires kill little trees*, that the primary approach of the Commission to forest fire prevention is based. Through a program beginning with personal contacts the need for preventing wildfires is brought to the attention of every man, woman and child in the state. Commission personnel also utilize other media of communication such as posters, pocket and wall calendars, roadside signs, exhibits, publications, illustrated talks, newspaper articles and radio and television programs to bring the conservation message to each citizen of the state.

COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

The Cooperative Forest Fire Prevention Campaign supplements local materials and programs with those produced in cooperation with the federal government and other states. It reinforces local efforts to reach, in one way or another, every man, woman, and child within the state. This national program, featuring Smokey Bear, is guided by The Advertising Council, Inc., in cooperation with the State Foresters and the U. S. Forest Service. The program is backed by American business as a public service campaign. The advertising agency, Foote, Cone and Belding, of Los Angeles, California, volunteers time and services to prepare materials to make the Cooperative Forest Fire Prevention Campaign one of the nation's most outstanding public service campaigns. Smokey Bear's campaign in South Carolina is supported by a wide variety of materials including posters, booklets, bookmarks, newspaper ads, radio platters, TV films, and other materials to bring forest fire prevention information and reminders to men, women, and children.

SMOKEY'S FRIENDS DON'T PLAY WITH MATCHES



Please Only you can prevent forest fires!



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

STANDARD FOREST SERVICE LOGO

Working with the national Cooperative Forest Fire Prevention Campaign, Commission personnel throughout the state are actively distributing posters, bookmarks, booklets, stuffers and many other items produced under the guidance of The Advertising Council, Inc.

A number of products licensed to use the Smokey Bear symbol, and carrying a forest fire prevention message, provide additional ways of reaching people with fire prevention reminders. Among the items produced under license are: Smokey Bear ash trays, wallets, moccasins, T-shirts, scarfs, fishing tackle, archery sets, cigarette snuffers, belts, figurines, salt and pepper shakers, handkerchiefs, coloring books, comic books, story books, calendars, candies and cookies, charcoal picnic grills, hats, dungarees, jigsaw puzzles, Smokey Bear dolls, electric clocks, and other items.

SOUTHERN COOPERATIVE FOREST FIRE PREVENTION CAMPAIGN

Recognizing the need for a more southern slant than the national campaign can provide, the states and the U. S. Forest Service in the South have continued to cooperate in the production of forest fire prevention materials with a southern flavor. The eighth year's operation of the southern program saw continued production of recorded radio spots, a series of TV spots, news ads and stuffers, all of which are currently being distributed. The southern materials supplement the national materials to intensify and strengthen forest fire prevention efforts in South Carolina.

SCHOOL PROGRAMS

School children throughout the state received basic information on forestry and forest fire prevention from Forestry Commission foresters, rangers and wardens. Some 998 programs were held in the fifth and sixth grades, where school-yard demonstrations of fire control equipment and suppression techniques, flip charts and color slides were used to help bring the conservation story to the classroom. In these two grades alone 47,145 school children were given basic information about the conservation of our forest resources. Similar demonstrations and slide programs were held in vocational agriculture classes in each county.

In addition to the slide programs and demonstrations, all third grade children throughout the state (68,000) received copies of the booklet "Smokey Bear's Story of the Forest." An equal number of second grade students received coloring sheets



Forestry movies, shown by county personnel in classrooms each year, bring vital conservation concepts to the attention of thousands of young minds.

with forest fire prevention and conservation messages. Over 64,000 fourth graders received a booklet "The True Story of Smokey the Bear."

Forestry movies were also shown in schools, bringing conservation information to students of all grade levels.

The Commission's school programs are designed to add to each child's understanding of the total stewardship of life, building toward a stronger and more appreciative community of the future. The programs give basic information to children on the value of woodlands and the care needed to make them produce and contribute to a prosperous future.

FORESTRY DEMONSTRATIONS

During the year 2,580 persons attended 111 demonstrations conducted by personnel of the Forestry Commission. These demonstrations covered forest fire protection, correct cutting methods, utilization of forest products, reforestation, control of undesirable species, and timber stand improvement.

In most cases demonstrations were held in cooperation with foresters of various companies, the Clemson University Extension Service, and other groups and organizations.

CONSERVATION WEEK AND ARBOR DAY

Many people, agencies, and organizations cooperated to make the observance of 1966 Arbor Day and Conservation Week a success. South Carolina Law designates the first Friday in December as Arbor Day, and the week in which Arbor Day falls is observed as Conservation Week. The State Commission of Forestry, Garden Clubs, Federated Women's Clubs, schools, churches, civic and patriotic organizations, newspapers, radio and television stations and others cooperate in placing the challenge of conservation before the people of South Carolina.

As in past years, 50,000 copies of a special folder were printed and distributed to schools and other groups to assist them in planning programs and observances for Arbor Day and Conservation Week.

Forestry Commission personnel gave numerous talks at meetings held during Conservation Week. Many of the programs included tree planting exercises. Incomplete records show 305 Conservation Week and Arbor Day programs were presented to 21,887 children and adults.

FIRE PREVENTION ROADSIDE SIGNS

Roadside signs continued to carry three messages in the following sequence: USE YOUR ASH TRAY — HELP PREVENT WILD FIRES — PROTECT LITTLE TREES, KEEP SOUTH CAROLINA GREEN. First erected in February 1953, the fire prevention roadside signs appear on highways throughout the state. The Commission purchases additional signs each year and replaces worn out and damaged signs so thousands of motorists will continue to see these forest fire prevention reminders.

Also, for the first time, large 8-foot Smokey Scotchlite signs were erected in many of South Carolina's state parks during the year. They remind park users of the need for care in using fire.

MOTION PICTURES

Motion pictures are valuable aids in teaching conservation, and films are often used to supplement talks. Each district office has motion picture equipment which is used for forestry motion picture showings in every county in the state.

Films on forest fire control, forest management, reforestation and other forestry subjects are shown to school and church groups, civic clubs, community organizations, and others.

In many cases films are loaned for showing by schools, clubs, and other groups that have motion picture projectors.

During the year 39,697 people saw motion pictures on forestry at 542 showings.

VOCATIONAL AGRICULTURE SCHOOL FORESTRY PROGRAM

In 1930 forestry was added as a course of study in vocational agriculture classes in South Carolina. Each year the Agricultural Education staff of the State Department of Education and the State Commission of Forestry work together to teach vocational agriculture students the importance of forest conservation.

School forest laboratories serve as aids in teaching forestry. They are "outdoor classrooms" where young men learn by doing. The students construct firebreaks to protect their laboratory from fire. They learn to plant trees, eliminate weed trees, select, measure, and estimate merchantable volumes in trees which are to be harvested. Timber in need of cutting is sold under contract as the students learn to market forest products. The laboratory is divided into a number of small plots to be worked one each year. One plot is left untreated to compare with plots where good forestry practices are carried out.

The annual Chapter Forestry Contest sponsored by the Forestry Commission was changed during the year. This year an engraved plaque and a check for \$100.00 was presented to the chapter in each vocational agriculture district which received the most outstanding forestry training and demonstrated that training in their forest laboratory. From the six district winners the most outstanding chapter was selected as a state winner. This chapter received an enlarged plaque

declaring them the most outstanding chapter in the state in forestry training and demonstration. They were presented a check for \$200.00.

Winning chapters are as follows:

State Winner

Calhoun Falls — District I

District Winners

Rock Hill	— District II
Gilbert	— District III
Walterboro	— District IV
St. Johns	— District V
Conway	— District VI

Two years ago a pilot 2-year forestry course was begun at Winnsboro High School to train boys enrolled in vocational agriculture in basic field forestry work. This “forestry aide” course was extended to six other schools the following year. Plans are being made to add forestry courses in 11 other schools for the 1967-68 school year.

The forestry advisory committee for each of these schools includes local school officials, state, industrial and private foresters and other interested local leaders. This training shows great promise in preparing students for jobs in forestry and forestry related fields, and encouraging many to seek further training in forestry in universities and ranger schools, after graduation from high school.

RESOURCE-USE EDUCATION

Resource-use education continues to stimulate interest in the out-of-doors as an aid to effective teaching, as well as a means of instilling conservation concepts.

State park nature trails served effectively as “outdoor classrooms” as forestry and state park personnel worked with many school groups and others in carrying out projects and instruction in the field of conservation.

The State Commission of Forestry, through its membership in the S. C. Advisory Council on Conservation Education participated in the “Conservation Curriculum Improvement Project of the State Department of Education.” This project,

financed through the Belle W. Baruch Foundation prepared teaching guides for all school grade levels. The eight guides entitled "A View of The Environment" were especially adapted to:

Grades 1-3

Grades 4-6

Grades 7-9, Social Studies

Grades 10-12, Social Studies

Grades 7-9, Science

Biology

Home Economics

Outdoor Classrooms, Camping and Recreation

These guides were prepared by selected teachers with Dr. Paul F. Brandwein and Dr. Matthew J. Brennan of the Pinchot Institute for Conservation Studies serving as consultants. Representatives of resource agencies served as technical advisors.

Completed guides were used by some 2,000 teachers in schools throughout the state who made recommendations for changes and additions. These will be incorporated into the teaching guides during the summer of 1967 by members of the original writing team before they are given wider distribution in the state and throughout the nation.

TALKS

State Commission of Forestry personnel give talks about forestry and state parks before many groups. The use of color slides with many of the talks helps make them more interesting and more effective.

During the year a total of 233 talks were made by Commission personnel to 8,658 people. Civic clubs, church groups, school groups, and other organizations were among those requesting talks.

Person-to-person talks with landowners and others continued to be one of the main ways Commission personnel pass along information on forestry and state park matters to South Carolinians. Important points of contact between personnel of the Commission and the public are the 138 fire towers where persons visiting saw the work of detecting, reporting, dispatching, fighting and preventing fires explained or demonstrated.

EXHIBITS

Exhibits provide an excellent means of placing forestry and state park information before the people.

More than 1,709,700 people saw forestry and state park exhibits and displays in fairs, parades, and special meetings as follows:

EXHIBITS AT STATE AND COUNTY FAIRS

Location of Exhibit- County Fair	Type of Exhibit	Est. Attend.
Pageland	Commercial Woods of S. C.	4,000
Camden	Talking Smokey	12,000
Lancaster	Mr. Tree Farmer	15,000
Bishopville	Commercial Woods of S. C.	4,500
Sumter	Mr. Tree Farmer	30,000
Florence	Commercial Woods of S. C.	175,000
Loris	Commercial Woods of S. C.	7,000
Moncks Corner	Talking Smokey	5,000
Abbeville	Talking Smokey	13,000
Chester	Commercial Woods of S. C.	6,000
Greenwood	Commercial Woods of S. C. and "It's The Law"	62,000
Laurens	Talking Smokey	22,000
Newberry-Saluda	Talking Smokey	32,000
Orangeburg	Talking Smokey	60,000
Anderson	Mr. Tree Farmer	90,000
Greenville	Talking Smokey	50,000
Pickens	Talking Smokey	12,000
Union	Talking Smokey	35,000
Spartanburg	Talking Smokey and Ranger's Pickup	85,000
Rock Hill	Talking Smokey	13,500
Greenville-Pickens Speedway	Talking Smokey	95,000
Beaufort	"There's Power In The Forest"	5,000
Charleston	Talking Smokey	130,000
McCormick	"It's The Law"	4,000
Marion	"It's The Law"	11,000
TOTAL—County Fair Exhibits		978,000
State Fairs		
Columbia	Mr. Tree Farmer & Superior Trees Panel	300,000
Palmetto	Mr. Tree Farmer & Superior Trees Panel	150,000
TOTAL—State Fair Exhibits		450,000
TOTAL—Fair Exhibits		1,428,000



At the Silver Anniversary celebration of the American Tree Farm System, September 22, 1966, Governor Robert McNair, inspects a paper dress like the ones worn by Miss Betty Jo Nalley (left) and Mrs. Jean Halberg (right). An exhibit, "Mr. Tree Farmer", shown in the background, was also a part of the Commission's exhibit at the 1966 State Fair.

EXHIBITS, FLOATS AND DISPLAYS FOR SPECIAL EVENTS

(Other than County or State Fairs)

Shaw Air Force Base (Fire Prevention Parade) Smokey on Pickup	8,000
Camden (Garden Club Exhibit) Talking Smokey	1,000
Camden (Industrial Fair) Talking Smokey	10,000
Chesnee (Christmas Parade) Fire Control	12,000
Spartanburg (Patriots Day Parade) Fire Control	40,000
Dillon (Christmas Parade) Smokey Bear Float	10,000
Aynor (Christmas Parade) Smokey Bear Float	2,500
Loris (Christmas Parade) Smokey Bear Float	3,700
Langley-Bath-Clearwater (Christmas Parade) Smokey Bear and Equipment	3,500
New Ellenton (Christmas Parade) Smokey Bear and Equipment	1,800
Allendale (Christmas Parade) Smokey Bear and Equipment	4,000
Ehrhardt (Christmas Parade) Smokey Bear and Equipment	2,500
Barnwell (Christmas Parade) Smokey Bear and Equipment	5,000
Blackville (Christmas Parade) Smokey Bear and Equipment	300
Williston (Christmas Parade) Smokey Bear and Equipment	3,000
Columbia (Fire Prevention Parade) Ranger's Pickup with Smokey	45,000
Boiling Springs (Christmas Parade) Smokey Bear and Equipment	3,000
Gilbert (Peach Festival) Smokey Bear and Equipment	6,000
Lexington (Christmas Parade) Smokey Bear and Equipment	7,000
West Columbia-Cayce (Christmas Parade) Smokey Bear and Equipment	7,000
Bowman (Christmas Parade) Smokey Bear and Equipment	1,000
Orangeburg (Beauty Pageant Parade) Smokey Bear and Equipment	3,000
Beaufort (Christmas Parade) Smokey Bear	5,000
North Charleston (Christmas Parade) Smokey Bear	75,000
St. Andrews (Christmas Parade) Smokey Bear	8,000
Walterboro (Christmas Parade) Smokey Bear	4,000
Hampton (Christmas Parade) Smokey Bear	1,500
Hampton (Watermelon Festival Parade) Smokey Bear	5,000
Ridgeland (Christmas Parade) Smokey Bear	2,200
Hardeeville (Christmas Parade) Smokey Bear	1,700

Total Floats and Displays 281,700

GRAND TOTAL, Exhibits, Floats, Displays 1,709,700

RADIO AND TELEVISION

Radio and television stations in South Carolina cooperate generously with the Forestry Commission by providing air time for many programs on forest fire prevention, forest management and other phases of forestry, and on educational, historical, and recreational facilities of South Carolina's state parks.

Several districts have regularly scheduled programs on various radio stations.

A number of television programs were presented on forest fire prevention and other forestry information. Records show that at least 360 live or taped radio and TV programs on state parks and forestry were presented during the year. This number does not include the hundreds of recorded programs and film spots carried by radio and television stations, using material made available through the National and Southern Cooperative Forest Fire Prevention Campaigns, and spot announcement material prepared by the Forestry Commission for special use during periods of high fire danger.

NEWS RELEASES AND ARTICLES

Newspapers provided excellent coverage, placing forestry and state park news before the people regularly.

During the year Commission personnel prepared 725 news articles. This is not a complete picture of the news coverage that the Commission received during the year. Many times, such as during serious fire situations, news items are telephoned to individual papers and to the wire services. Many stories are written by newspaper editors and reporters.

In addition to news releases, a number of feature articles on state parks and forestry were prepared. Photographs or mats illustrating the story were often included with the feature. Commission personnel in every county of the state prepare news articles. In this way, news is localized.

FOREST FIRE EMERGENCY

An extended period in March and April with no rain, low humidity, and high winds, kept fire fighters in South Carolina

on the run as 1,250 wildfires burned 32,000 acres in a twenty-eight day period which began March 26, 1967. Though losses were not as great as in March 1966 it did test the alertness and stamina of the state's fire fighting organization.

Most unfortunate was the loss of one life as a direct result of fire when on April 6, Mr. Arlie Edward Scott, resident and landowner in Aiken County, was trapped by flames. At the time he was operating a farm tractor, plowing lines to assist Forestry Commission personnel and other local volunteers in their efforts to contain a serious blaze that burned from near Windsor to Aiken State Park.

The fire emergency was given excellent coverage by newspapers, radio and television stations.

PUBLICATIONS

The State Commission of Forestry utilizes a wide variety of publications to carry out its information and education program. One important function of printed materials is to provide detailed information to those who request forestry and state park information.

Over the years the Commission has published a number of booklets, folders, leaflets, and other materials. The Commission also distributes materials published by the U. S. Department of Agriculture, Clemson University, American Forest Products Industries, Inc., various forest industry companies and associations, and other organizations, groups, and agencies which publish material that is useful and applicable in South Carolina. The use of such material minimizes the need for printing special publications in many cases.

Also, Commission personnel often prepare articles for forestry magazines and other types of periodicals. This gives forestry and state park information widespread distribution at little or no cost to the Commission. In some cases reprints of published articles are purchased to provide for additional distribution.

SIGN AND WOODWORKING SHOP

The Commission's sign and woodworking shop produces signs, exhibits, and other cabinet and carpentry work. The distinctive routed letter signs identify the various forestry and state park installations of the Forestry Commission. Exhibits constructed in the shop helped to bring forestry and state park information to many people during the year.

SOUTH CAROLINA TREE FARM SYSTEM

The South Carolina Tree Farm program gives public recognition to private timberland owners who are doing outstanding jobs in managing their forest lands, thereby encouraging others to do likewise. The basic aim of the Tree Farm program is to place more woodland under good forest management practices that will bring continuing benefits to the owners and produce more and better forest products and services.

To become a Tree Farmer a landowner must demonstrate both the desire and ability to protect his trees from fire, insects, disease, and destructive grazing. In addition, he must apply sound cutting practices to improve the growth of the timber stand. Forestry measures designed to insure the growing and harvesting of repeated tree crops must be followed, including measures to assure satisfactory reproduction, either from natural seeding or planting.

Before a woodland may be certified as a Tree Farm it must be inspected by a qualified forester who submits an Inspection Record for consideration by the State Tree Farm Committee. When a property is approved as a Tree Farm the owner is given a certificate and a diamond-shaped green and white sign denoting his membership in the Tree Farm System. It is hoped that his neighbors and others who see the sign and the good forestry practices will come to better understand forest values and forestry practices.

The South Carolina Tree Farm System is sponsored by the S. C. Forest Industries Committee, the state representative of American Forest Products Industries, Inc., the national sponsor, with the cooperation of the S. C. State Commission of

Forestry, the Clemson University Extension Service, and consulting foresters and woodland owners in South Carolina. A Tree Farm Committee, appointed by the chairman of the S. C. Forest Industries Committee, administers the program.

As of June 30, 1967, there were 738 Tree Farms in the state, comprising 2,332,515 acres.

APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1966 - June 30, 1967

RECEIPTS

Division of Forestry:

Balance from 1965-66, Forestry Commission—Specials	\$ 33,159.64
Balance from Deficiency Appropriation—Suppression Units ...	45,600.00
State Appropriation—Operating	2,326,618.00
State Appropriation—Statewide Forest Survey	40,000.00
State Appropriation—Wildlife Management, Manchester	6,100.00
Deficiency Appropriation—For Equipment Replacement	37,000.00
Forestry Commission—Specials, CM Law, Section 2	405,960.00
Forestry Commission—Specials, CM Law, Section 4	3,000.00
Forestry Commission—Specials, Coop. Forest Management	109,835.53
Forestry Commission—Specials, Soil Bank Title IV Program ..	29,813.31
Forestry Commission—Specials, Appalachia Program	7,009.19
Forestry Commission—Specials, A.S.C.S.	14,224.90
Forestry Commission—Specials, Watersheds	30,936.02
Forestry Commission—Specials, Firebreak Plowing	5,962.50
Departmental Revenue; State Forests, S.O.E.P.	130,300.62
Departmental Revenue; State Parks Forest Demons. Areas	66,669.38
Miscellaneous—Radio Coop. Funds	4,186.89
Miscellaneous—Other	13,626.43
Sand Hills State Forest—Federal	244,011.59
Nurseries	218,553.33
Timber Marking	10,852.16
Hunting and Fishing Permits—Manchester	5,938.25
Miscellaneous	986.18

Total Receipts—Forestry\$3,790,343.92
 Less Receipts Deposited to Credit of State Revenue Account 345,399.23

Total Receipts Available for Expenditure\$3,444,944.69
 Total Expenditures3,369,295.50

Balance—Division of Forestry\$ 75,649.19

Funds Available:

Division of Forestry	\$3,200,933.10
Sand Hills State Forest—Federal	244,011.59

\$3,444,944.69

Expenditures:

Division of Forestry	\$3,132,809.32
Sand Hills State Forest—Federal	236,486.18

3,369,295.50

Balance\$ 75,649.19

Balances:

Forestry Commission—Specials	\$ 31,123.78
Deficiency Appropriation—For Equipment Replacement	37,000.00
Sand Hills State Forest—Federal	7,525.41

Balances Carried Forward\$ 75,649.19

General Fund Revenue:

Nurseries	\$ 218,553.33
Timber Marking	10,852.16
Hunting and Fishing Permits, Manchester	5,938.25
Miscellaneous	986.18
Transferred to General Fund 6-30-67	69,069.31
Unexpended Balance—Statewide Forest Survey ...	40,000.00

Total—General Fund Revenue\$ 345,399.23

APPENDIX

FINANCIAL STATEMENT

SOUTH CAROLINA STATE COMMISSION OF FORESTRY

July 1, 1966 - June 30, 1967

RECEIPTS

Division of State Parks:

Balance from 1965-66, Forests and Parks Fund	\$ 13,245.44	
Balance from 1965-66, Parks Improvements	3,890.92	
Balance from 1965-66, Forestry Commission—State Parks— Permanent Improvements	247,150.00	
Balance from 1965-66, Myrtle Beach Fishing Pier	14,716.23	
Balance from 1965-66, Myrtle Beach Swimming Pool	1,464.34	
Balance from 1965-66, Damage to Myrtle Beach Pier & Park, etc.	62,469.47	
State Appropriation—Operating	456,385.00	
State Appropriation—Historical Areas	22,172.00	
Forests and Parks Fund—Hunting Island Deposits	2,149.81	
Forests and Parks Fund—Santee Boat Landing	2,167.01	
Forests and Parks Fund—Camping Areas (4)	796.40	
Forests and Parks Fund—Insurance Claims	10,500.00	
Parks Improvement—Croft	7,283.92	
Parks Improvements—B.O.R. Reimbursement	23,615.66	
Myrtle Beach Fishing Pier	52,168.70	
Myrtle Beach Swimming Pool	4,429.95	
Cabin Rentals	19,360.28	
Picnic Tables	5,535.29	
Refreshment Stands and Concessions	501.94	
Bathhouse and Swimming	34,644.60	
Boat Rentals	4,760.95	
Picnic Shelter Fees	4,169.15	
Recreation Building Rent	1,208.00	
Group Camps	12,478.35	
Trailer and Camping Fees	36,762.58	
Fishing Permits	1,909.07	
Miscellaneous and Sales Tax	1,261.07	
Total Receipts—Parks		\$1,047,196.13
Less Receipts Deposited to Credit of State Revenue Account		122,591.28
Total Receipts Available for Expenditures		\$ 924,604.85
Total Expenditures		732,831.67
Balance—Division of State Parks		\$ 191,773.18

Balances:

Forests and Parks Fund	\$ 8,647.79	
Parks Improvements	22,125.74	
Forestry Commission—State Parks—Permanent Improvements .	121,309.52	
Damage to Myrtle Beach Pier and Park, etc.	26,173.16	
Myrtle Beach Fishing Pier	10,523.15	
Myrtle Beach Swimming Pool	2,993.82	
Balances Carried Forward		\$ 191,773.18

TABLE 1—PROTECTION PERSONNEL
Fiscal Year 1966-67

UNIT	ORGANIZED PERSONNEL					Volunteer Personnel	GRAND TOTAL
	Rangers	Wardens	Tractor Operators	Towermen	Total		
Abbeville	1	2	1	1	5	124	129
Aiken	1	5	1	5	12	338	350
Allendale	1	2	1	3	7	48	55
Anderson	1	2	1	3	7	192	199
Bamberg	1	2	1	2	6	251	257
Barnwell	1	2	2	2	7	226	233
Beaufort	1	3	2	4	10	171	181
Berkeley	1	4	2	4	11	514	525
Calhoun	1	2	1	2	6	113	119
Charleston	1	4	3	3	11	269	280
Cherokee	1	1	1	1	4	135	139
Chester	1	3	1	1	6	223	229
Chesterfield	1	3	1	4	9	187	196
Clarendon	1	3	2	3	9	337	346
Colleton	1	5	2	5	13	370	383
Darlington	1	2	..	3	6	508	514
Dillon	1	2	1	2	6	206	212
Dorchester	1	4	2	3	10	277	287
Edgefield	1	2	1	1	5	68	73
Fairfield	1	4	1	3	9	190	199
Florence	1	4	2	4	11	697	708
Georgetown	1	4	2	4	11	531	542
Greenville	1	3	1	4	9	266	275
Greenwood	1	2	1	2	6	183	189
Hampton	1	3	1	3	8	191	199
Horry	1	5	3	4	13	672	685
Jasper	1	3	2	2	8	316	324
Kershaw	1	4	2	6	13	448	461
Lancaster	1	3	1	2	7	312	319
Laurens	1	3	1	2	7	239	246
Lee	1	2	1	3	7	103	110
Lexington	1	3	2	5	11	278	289
Marion	1	3	2	3	9	385	394
Marlboro	1	3	2	3	9	127	136
McCormick	1	1	1	1	4	42	46
Newberry	1	2	1	2	6	161	167
Oconee	1	2	1	3	7	279	286
Orangeburg	1	5	3	5	14	409	423
Pickens	1	3	1	4	9	205	214
Richland	1	5	2	4	12	527	539
Saluda	1	2	1	1	5	62	67
Spartanburg	1	3	1	4	9	409	418
Sumter	1	3	2	3	9	545	554
Union	1	2	1	1	5	166	171
Williamsburg	1	5	2	4	12	802	814
York	1	2	1	4	8	329	337
TOTALS	46	137	67	138	388	13,431	13,819

TABLE 2—SUMMARY OF FIRES BY MONTHS
July 1, 1966 - June 30, 1967

MONTH	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
July	120	2.4	509.2	4.2
August	41	0.8	127.8	3.1
September	82	1.7	348.8	4.3
October	89	1.8	211.0	2.4
November	613	12.3	6,035.8	9.8
December	345	6.9	2,637.7	7.6
January	432	8.7	4,051.8	9.4
February	624	12.5	7,468.9	12.0
March	1,337	26.8	15,656.7	11.7
April	1,073	21.5	31,308.9	29.2
May	167	3.3	1,050.8	6.3
June	65	1.3	173.0	2.7
TOTALS	4,988	100.0	69,580.4	13.9

TABLE 3—SUMMARY OF FIRES BY CAUSES—FISCAL YEAR 1966-67

COUNTY	Lightning		Campfire		Smoking		Debris Burning		Incendiary		Machine Use		Miscellaneous		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Abbeville	1	2.4	..	..	4	4.8	8	27.4	3	42.8	2	14.2	5	20.4	23	112.0
Aiken	7	53.8	4	10.3	40	129.6	31	4,368.6	9	81.0	6	32.1	24	45.7	121	4,721.1
Allendale	..	..	..	..	12	24.9	19	32.0	22	187.0	4	9.1	6	16.5	63	269.5
Anderson	..	..	3	..	30	231.0	23	52.5	8	35.2	..	..	7	23.7	71	343.6
Barnberg	..	..	1	1.5	10	112.0	22	94.9	8	218.0	4	26.5	10	39.7	55	492.6
Barnwell	..	..	2	14.0	36	216.4	19	98.0	5	236.8	..	..	2	1.2	64	566.4
Beaufort	..	..	5	85.8	16	78.0	22	505.1	42	441.3	2	4.2	6	43.3	93	1,157.7
Berkeley	..	..	..	..	52	704.2	49	725.1	107	2,719.7	4	83.5	3	25.0	215	4,257.5
Calhoun	1	8.8	..	..	12	42.0	1	2.4	3	6.4	..	..	3	1.6	20	61.2
Charleston	1	3.0	2	16.4	48	439.6	19	373.6	16	103.9	1	1.0	24	239.8	111	1,177.3
Cherokee	..	..	..	..	10	50.7	2	18.0	2	7.0	2	20.0	8	106.1	24	201.8
Chester	1	0.5	3	26.3	17	206.8	12	87.3	1	0.6	6	15.4	2	9.4	42	346.3
Chesterfield	8	84.0	2	4.0	6	17.7	7	105.9	11	77.9	15	1,672.6	21	308.3	70	2,270.4
Clarendon	..	..	7	65.2	42	237.8	113	1,876.8	101	1,790.8	4	9.5	3	5.7	270	3,985.8
Colleton	..	..	9	89.9	71	538.2	58	879.9	69	414.2	3	27.6	4	12.0	214	1,961.8
Darlington	5	19.0	1	78.0	36	239.6	38	323.0	7	6.9	11	27.4	14	25.5	112	719.4
Dillon	..	..	..	..	42	90.5	28	505.6	1	0.1	1	0.2	9	10.0	81	606.4
Dorchester	..	..	3	22.0	99	1,248.0	25	124.0	3	61.0	4	3.2	2	5.0	136	1,463.2
Edgefield	1	1.5	..	..	5	24.6	3	5.8	1	1.0	2	26.2	5	54.6	17	113.7
Fairfield	1	3.0	2	2.4	25	250.2	5	19.8	..	..	11	68.3	7	96.3	51	440.0
Florence	..	..	5	38.6	56	507.8	65	517.2	..	..	2	28.4	20	112.5	417	4,903.0
Georgetown	1	0.1	..	..	40	196.5	21	182.8	99	1,111.6	9	28.4	5	42.0	186	1,608.8
Greenville	..	..	4	15.3	35	191.2	23	88.9	..	..	7	11.5	21	61.5	90	368.4
Greenwood	..	..	4	4.5	10	8.8	14	65.6	13	86.2	8	139.1	11	27.1	60	381.3
Hampton	2	3.0	4	9.4	5	10.8	32	330.2	48	858.1	5	77.1	6	6.8	102	1,295.4
Horry	1	0.1	4	21.8	59	385.1	84	8,028.4	163	5,023.0	12	96.5	48	157.5	371	13,712.4
Jasper	..	..	3	27.1	34	220.2	60	1,252.4	83	1,278.5	7	73.5	14	42.4	201	2,894.1
Kershaw	3	3.8	6	43.8	19	237.2	20	99.8	9	40.9	21	1,589.1	14	1,147.7	92	3,162.3
Lancaster	..	..	7	64.5	18	164.1	14	188.1	3	0.6	4	15.5	5	15.4	51	448.2
Laurens	..	..	1	3.0	22	194.6	19	87.9	2	1.2	11	18.9	15	40.1	70	345.7
Lee	..	..	5	22.0	23	115.8	13	133.5	8	32.5	2	11.5	7	12.6	58	327.9
Lexington	2	2.2	3	21.0	23	76.2	19	156.3	2	152.0	8	88.7	19	109.0	76	605.4
Marion	..	..	3	8.5	30	106.3	32	118.6	11	197.4	9	72.0	8	9.8	93	512.6
Marlboro	2	1.1	1	0.1	30	102.5	29	195.7	21	117.3	7	7.7	13	219.5	103	643.9
McCormick	..	..	..	..	4	2.8	2	1.2	1	1.5	2	0.8	6	23.3	15	29.6

TABLE 4—SUMMARY OF FIRES BY FIRE CLASS—FISCAL YEAR 1966-67

COUNTY	CLASS A		CLASS B		CLASS C		CLASS D		CLASS E		CLASS F		CLASS G		TOTAL	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Abbeville	6	1.1	15	63.9	2	47.0	..	...	..	...	1	4,150.0	..	...	23	112.0
Aiken	11	1.9	95	258.2	14	311.0	..	...	..	...	..	...	..	...	121	4,721.1
Allendale	14	2.1	45	132.4	4	155.0	..	...	..	...	..	...	..	...	63	269.5
Anderson	7	1.5	57	145.1	7	197.0	..	...	..	...	..	...	..	...	71	343.6
Barnberg	2	0.4	43	109.2	9	209.0	1	174.0	..	...	..	...	..	...	55	492.6
Barnwell	3	0.6	51	177.8	9	249.0	1	139.0	..	...	..	...	..	...	64	566.4
Beaufort	1	0.1	67	280.6	23	666.0	2	211.0	..	...	..	...	..	...	93	1,157.7
Berkeley	5	0.8	138	575.7	66	2,219.0	5	1,007.0	1	455.0	..	...	..	...	215	4,257.5
Calhoun	2	0.4	17	40.8	1	20.0	..	...	..	...	..	...	..	...	20	61.2
Charleston	3	0.5	87	271.8	19	467.0	2	438.0	..	...	..	...	..	...	111	1,177.3
Cherokee	1	0.1	19	45.7	4	156.0	..	...	..	...	..	...	..	...	24	201.8
Chester	2	0.4	31	76.9	9	263.0	..	...	..	...	..	...	..	...	42	346.3
Chesterfield	4	0.6	47	182.8	17	448.0	1	130.0	..	...	1	1,509.0	..	...	70	2,270.4
Clarendon	13	1.8	186	754.0	64	1,888.0	6	1,007.0	1	335.0	..	...	..	...	270	3,985.8
Colleton	34	4.5	151	525.3	26	899.0	3	533.0	..	...	..	...	..	...	214	1,961.8
Darlington	14	1.8	86	245.6	12	472.0	..	...	..	...	..	...	..	...	112	719.4
Dillon	22	3.3	56	124.1	2	29.0	..	...	1	450.0	..	...	..	...	81	606.4
Dorchester	1	0.2	104	425.0	30	858.0	1	180.0	..	...	..	...	..	...	136	1,463.2
Edgefield	1	0.2	12	36.5	4	77.0	..	...	..	...	..	...	..	...	17	113.7
Fairfield	2	0.3	42	97.7	6	146.0	1	196.0	..	...	..	...	..	...	51	440.0
Florence	35	5.2	287	897.8	89	2,635.0	5	965.0	1	400.0	..	...	..	...	417	4,903.0
Georgetown	24	4.1	123	320.7	38	1,136.0	1	148.0	..	...	..	...	..	...	186	1,608.8
Greenville	16	2.3	67	173.1	7	193.0	..	...	..	...	..	...	..	...	90	368.4
Greenwood	13	1.9	42	64.1	4	202.3	1	113.0	..	...	..	...	..	...	60	381.3
Hampton	7	0.8	71	211.6	22	806.0	2	278.0	..	...	..	...	..	...	102	1,295.4
Horry	30	4.2	260	759.2	69	1,947.0	7	1,272.0	2	1,068.0	2	2,657.0	1	6,005.0	371	13,712.4
Jasper	20	3.2	125	440.9	51	1,484.0	4	664.0	1	302.0	..	...	..	...	201	2,894.1
Kershaw	11	1.7	68	171.6	10	188.0	1	180.0	..	...	2	2,621.0	..	...	92	3,162.3
Lancaster	13	2.3	28	106.9	9	218.0	1	121.0	..	...	..	...	..	...	51	448.2
Laurens	12	1.8	50	102.9	7	131.0	1	110.0	..	...	..	...	..	...	70	345.7
Lee	..	...	53	165.9	5	162.0	..	...	..	...	..	...	..	...	58	327.9
Lexington	10	1.6	54	130.5	10	213.3	2	260.0	..	...	..	...	..	...	76	605.4
Marion	20	3.1	61	124.5	11	257.0	1	128.0	..	...	..	...	..	...	93	512.6
Marlboro	18	2.5	72	148.4	12	338.0	1	155.0	..	...	..	...	..	...	103	643.9
McCormick	2	0.4	12	13.6	1	15.6	..	...	..	...	..	...	..	...	15	29.6

Newberry	4	0.5	16	23.5	3	45.0	1	292.0	..	....	..	....	..	....	24	361.0
Oconee	10	1.5	52	125.1	4	161.0	..	....	..	....	..	....	..	....	66	287.6
Orangeburg	18	2.7	162	694.6	80	1,856.0	..	....	..	....	..	....	..	....	260	2,553.3
Pickens	3	0.4	29	74.5	10	302.0	..	....	..	....	..	....	..	....	42	376.9
Richland	18	2.4	96	221.6	28	674.2	..	....	2	964.0	..	....	..	....	144	1,862.2
Saluda	1	0.1	9	16.2	1	31.0	..	....	..	....	..	....	..	....	11	47.3
Spartanburg	16	..	42	172.6	17	398.0	..	....	..	....	..	....	..	....	59	570.6
Sumter .....	..	2.5	113	397.9	32	793.0	3	383.0	..	....	..	....	..	....	164	1,576.4
Union .....	..	..	37	88.5	7	148.7	..	....	..	....	..	....	..	....	44	237.2
Williamsburg	42	5.2	144	585.6	78	2,640.0	6	890.0	1	384.0	..	....	..	....	271	4,494.8
York	2	0.2	59	185.2	3	81.0	..	....	1	440.0	..	....	..	....	65	706.4
TOTALS	493	73.2	3,481	10,986.1	936	26,817.1	60	9,964.0	11	4,798.0	6	10,937.0	1	6,005.0	4,988	69,580.4

TABLE 5—SUMMARY OF FIRES BY COUNTIES AND MONTHS
FISCAL YEAR 1966-67

COUNTY	July 1966		Aug. 1966		Sept. 1966		Oct. 1966		Nov. 1966		Dec. 1966		Jan. 1967		Feb. 1967		March 1967		April 1967		May 1967		June 1967	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Abbeville	1	3.2	..	..	1	4.2	..	..	4	11.3	1	3.2	2	4.6	2	9.6	3	37.3	6	22.0	1	14.0	2	2.6
Aiken	5	19.5	2	15.1	5	3.6	7	8.3	7	20.7	9	36.0	12	73.1	9	50.7	31	197.0	21	4,278.0	10	13.3	3	5.8
Allendale	2	1.5	..	..	..	..	4	5.7	12	48.6	6	5.4	13	32.6	2	0.7	12	114.3	10	57.8	2	2.9	..	..
Anderson	11	85.4	1	3.2	2	1.9	..	..	7	16.6	1	1.5	5	7.2	12	34.0	16	133.0	15	60.6	1	0.2	..	..
Bamberg	1	0.5	..	..	..	..	1	2.8	7	32.7	4	3.2	4	2.6	6	92.3	19	255.5	11	92.0	2	11.0	..	..
Barnwell	1	0.8	..	..	2	4.4	..	..	10	59.3	5	10.6	8	38.2	12	123.8	13	104.5	11	223.6	1	1.0	..	..
Beaufort	..	..	..	..	..	..	..	..	8	65.6	8	28.0	9	81.6	12	146.8	39	621.1	14	206.0	1	3.2	1	2.4
Berkeley	..	..	..	..	..	..	1	5.0	24	354.7	14	273.5	21	119.0	42	1,008.3	54	858.7	49	1,491.6	7	117.1	2	29.0
Calhoun	1	8.8	..	..	..	..	1	0.2	2	1.8	1	1.2	..	..	7	34.4	4	6.6	4	8.2	..	..	..	..
Charleston	1	10.0	..	..	..	..	2	2.8	23	196.7	9	24.9	7	20.7	12	113.4	31	321.5	21	470.7	5	16.6	..	..
Cherokee	1	3.2	..	..	..	..	..	..	1	4.0	..	..	..	..	3	3.1	13	150.0	5	39.5	1	2.0	..	..
Chester	7	17.0	..	..	..	..	..	..	2	1.3	3	6.4	1	5.2	1	0.2	11	64.0	15	209.8	..	..	1	2.4
Chesterfield	8	86.4	4	9.5	2	3.0	..	..	3	41.2	4	5.0	8	127.9	2	6.6	11	98.2	23	1,870.2	4	18.9	1	3.5
Clarendon	1	1.0	2	3.0	2	5.0	6	24.7	52	414.3	10	80.0	38	613.6	46	648.9	45	1,161.4	61	918.9	7	115.0	..	..
Colleton	..	..	3	0.3	5	77.8	1	5.0	41	113.9	12	85.1	8	147.0	22	54.0	78	644.7	39	815.9	4	18.0	1	0.1
Darlington	..	..	3	1.7	..	..	4	4.3	10	46.6	12	34.0	9	72.8	13	73.9	21	83.3	24	340.9	4	30.1	11	31.4
Dillon	1	1.5	..	..	3	8.9	1	4.0	8	17.4	7	15.7	12	23.1	9	6.1	16	57.6	12	459.2	7	10.4	5	2.5
Dorchester	..	..	..	..	..	..	..	..	19	289.0	18	88.0	11	190.0	26	316.0	37	438.0	22	135.0	3	7.2	..	..
Edgefield	4	43.1	..	..	1	0.6	1	13.0	1	1.0	1	4.4	2	6.2	5	..	4	17.4	3	28.0	..	..	..	..
Fairfield	6	5.9	..	..	7	94.5	1	0.9	4	19.9	1	0.8	2	8.8	5	15.1	8	19.6	13	254.7	2	18.2	2	1.6
Florence	5	3.8	2	3.4	4	8.8	8	9.2	86	1,650.8	49	457.1	46	447.6	44	441.4	100	1,053.9	64	778.8	5	44.6	4	3.6
Georgetown	..	..	1	5.0	..	..	1	1.0	25	449.7	4	4.7	13	123.7	17	269.2	65	456.7	55	283.6	3	13.5	1	1.5
Greenville	2	7.8	..	..	..	..	..	..	5	34.1	4	2.7	6	9.9	15	34.8	36	231.4	18	43.6	2	2.7	1	0.6
Greenwood	2	1.2	1	0.3	5	2.9	8	6.0	2	0.8	7	6.3	2	5.5	4	5.1	13	33.0	12	252.7	3	67.2	1	0.3
Hampton	1	1.0	1	2.0	1	1.0	..	..	5	11.4	5	53.0	6	8.1	10	68.2	40	556.5	26	562.4	1	16.8	1	15.0
Horry	2	2.3	2	14.1	6	12.8	9	27.4	40	382.6	31	483.1	21	101.8	42	1,056.9	90	2,206.1	105	9,273.8	20	146.7	3	4.8
Jasper	2	0.2	1	4.0	2	15.7	2	5.9	24	452.1	21	225.4	29	604.5	30	441.5	55	625.3	30	476.5	5	43.0	..	..
Kershaw	6	16.6	1	0.2	7	12.2	2	12.9	5	25.4	1	0.1	12	230.0	9	15.0	22	105.6	22	2,716.6	3	24.0	2	3.7
Lancaster	5	58.2	..	..	4	16.2	1	1.5	2	0.4	1	0.2	4	30.8	4	60.6	13	86.1	16	193.4	1	0.8	..	..
Laurens	6	16.4	1	3.3	1	3.2	..	..	1	22.0	5	5.8	4	6.0	10	31.4	24	214.7	16	40.2	1	1.2	1	1.5
Lee	1	0.6	..	..	..	..	2	5.0	13	37.2	4	16.0	5	17.5	5	49.2	10	157.5	14	30.4	3	12.5	1	2.0
Lexington	7	6.0	..	..	5	9.4	4	3.3	6	10.0	7	40.9	9	48.6	7	18.0	14	187.2	12	257.7	5	24.3	..	..
Marion	..	..	3	15.6	2	1.1	2	2.6	14	26.7	4	3.7	5	23.4	9	36.8	21	121.2	25	269.8	3	4.5	5	7.2

Marlboro	6	6.7	..	...	1	2.0	2	0.7	12	13.8	6	3.8	6	49.3	13	226.9	29	253.1	21	79.6	4	6.6	3	1.4
McCormick	..	..	1	0.8	..	...	1	0.2	..	...	..	...	..	...	..	...	7	5.7	3	20.6	2	2.0	1	0.3
Newberry	1	1.0	1	1.6	..	0.3	1	0.4	3	13.0	..	...	..	...	3	0.4	2	0.8	9	339.1	3	4.4	..	...
Oconee	3	36.0	1	0.2	1	1.5	..	..	4	36.7	4	4.4	4	9.6	8	22.4	24	152.4	15	23.2	2	1.2	..	...
Orangeburg	..	...	..	...	..	...	6	25.0	49	366.1	20	185.4	23	266.9	41	494.0	59	611.9	49	536.0	9	39.0	4	29.0
Pickens	..	...	..	...	..	...	..	...	2	16.5	3	3.0	2	6.0	2	3.1	15	66.1	18	282.2	..	...	..	...
Richland	6	3.1	4	6.3	..	...	6	15.6	17	86.1	10	127.0	7	15.7	11	87.6	37	346.7	30	1,128.6	7	30.7	2	1.1
Saluda	1	1.9	1	31.0	..	0.5	..	...	2	2.1	..	...	1	2.5	..	...	1	1.0	4	8.3	..	...	..	...
Spartanburg	2	4.0	..	...	..	...	..	...	2	8.0	1	20.0	4	8.0	7	32.0	30	330.0	12	165.6	1	3.0	..	...
Sumter	2	15.7	1	0.4	..	...	3	16.0	20	215.8	12	111.0	14	116.8	22	268.7	47	595.6	37	200.9	4	34.9	2	0.6
Union	4	8.3	1	3.0	..	...	1	1.6	25	404.0	..	...	2	6.2	2	3.7	15	88.8	15	82.3	3	42.3	1	1.0
Williamsburg	..	...	..	...	..	...	..	...	..	...	15	159.5	30	328.1	62	1,047.9	82	1,717.0	50	757.0	5	66.2	2	15.1
York	3	30.0	..	...	2	2.8	..	...	4	13.9	5	17.7	5	11.1	4	16.2	20	68.7	16	523.4	5	19.6	1	3.0
TOTAL	120	509.2	41	127.8	82	348.8	89	211.0	613	6,035.8	345	2,637.7	432	4,051.8	624	7,468.9	1,337	15,656.7	1,073	31,308.9	167	1,050.8	65	173.0

TABLE 6—CLASSIFICATION BY CAUSES
Fiscal Year 1966-67

CAUSES	Number of Fires	Percent of Total Number	Area Burned (Acres)	Average Area Per Fire (Acres)
Lightning	44	0.9	282.4	6.4
Campers	129	2.6	917.8	7.1
Smokers	1,308	26.2	10,091.5	7.7
Debris Burning	1,262	25.3	25,288.8	20.0
Incendiary	1,472	29.5	23,428.3	15.9
Machine Use	296	5.9	5,615.3	19.0
Miscellaneous	477	9.6	3,956.3	8.3
TOTALS	4,988	100.0	69,580.4	13.9

TABLE 7—CAUSES OF FIRES—FIVE-YEAR PERIOD
(Percent of Total)

CAUSES	1962-63	1963-64	1964-65	1965-66	1966-67	Average For 5-Year Period
Lightning	0.9	1.6	1.1	0.6	0.9	0.9
Campers	3.1	3.5	2.8	2.1	2.6	2.8
Smokers	25.6	27.5	29.3	25.8	26.2	26.4
Debris Burning	26.8	24.6	24.3	25.6	25.3	25.5
Incendiary	30.5	21.9	25.0	30.8	29.5	28.3
Machine Use	3.7	5.4	4.0	4.2	5.9	4.7
Miscellaneous	9.8	15.5	13.5	10.9	9.6	11.4

TABLE 8—SUMMARY OF FIRES IN SOUTH CAROLINA
Fiscal Year 1966-67

UNIT	Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
Abbeville	194,361	23	112.0	.05	4.9
Aiken	477,331	121	4,721.1	.99	39.0
Allendale	190,786	63	269.5	.14	4.3
Anderson	211,031	71	343.6	.16	4.8
Bamberg	154,407	55	492.6	.32	9.0
Barnwell	161,433	64	566.4	.35	8.9
Beaufort	170,505	93	1,157.7	.68	12.4
Berkeley	404,049	215	4,257.5	1.05	19.8
Calhoun	131,757	20	61.2	.05	3.1
Charleston	264,643	111	1,177.3	.44	10.6
Cherokee	149,092	24	201.8	.14	8.4
Chester	262,651	42	346.3	.13	8.2
Chesterfield	359,570	70	2,270.4	.63	32.4
Clarendon	225,189	270	3,985.8	1.77	14.8
Colleton	500,875	214	1,961.8	.39	9.2
Darlington	177,189	112	719.4	.41	6.4
Dillon	146,786	81	606.4	.41	7.5
Dorchester	282,250	136	1,463.2	.52	10.8
Edgefield	196,105	17	113.7	.06	6.7
Fairfield	375,414	51	440.0	.12	8.6
Florence	291,549	417	4,903.0	1.63	11.8
Georgetown	389,793	186	1,608.8	.41	8.6
Greenville	286,608	90	368.4	.13	4.1
Greenwood	175,510	60	381.3	.22	6.4
Hampton	283,378	102	1,295.4	.46	12.7
Horry	494,462	371	13,712.4	2.77	37.0
Jasper	277,557	201	2,894.1	1.04	14.4
Kershaw	419,876	92	3,162.3	.75	34.4
Lancaster	230,775	51	448.2	.19	8.8
Laurens	276,837	70	345.7	.12	4.9
Lee	117,215	58	327.9	.28	5.7
Lexington	302,394	76	605.4	.20	8.0
Marion	228,579	93	512.6	.22	5.5
Marlboro	174,497	103	643.9	.37	6.3
McCormick	143,541	15	29.6	.02	2.0
Newberry	232,222	24	361.0	.16	15.0
Oconee	233,784	36	287.6	.12	4.4
Orangeburg	377,160	260	2,553.3	.68	9.8
Pickens	217,575	42	376.9	.17	9.0
Richland	311,022	144	1,862.2	.60	12.9
Saluda	182,185	11	47.3	.03	4.3
Spartanburg	242,131	59	570.6	.24	9.7
Sumter	231,546	164	1,576.4	.68	9.6
Union	206,601	44	237.2	.11	5.4
Williamsburg	410,339	271	4,494.8	1.10	16.6
York	277,440	65	706.4	.25	10.9
TOTALS	12,050,000	4,988	69,580.4	.58	13.9

**TABLE 9—FIVE-YEAR SUMMARY
Forest Fire Statistics**

FISCAL YEAR	Total Area Protected (Acres)	Number of Fires	Area Burned (Acres)	Percent Area Burned	Average Area Per Fire (Acres)
1962-63	11,175,000	5,441	68,315.1	0.61	12.5
1963-64	11,175,000	3,817	34,752.2	0.31	9.1
1964-65	12,050,000	2,442	18,826.5	0.16	7.7
1965-66	12,050,000	5,467	127,804.9	1.06	23.4
1966-67	12,050,000	4,988	69,580.4	0.58	13.9
Five-Year Average	11,700,000	4,431	63,855.8	0.55	14.4

**TABLE 10—STATE SUMMARY LAW ENFORCEMENT
INFORMATION—Fiscal Year 1966-67**

	Camden	Florence	Kingstree	Newberry	Orangeburg	Spartanburg	Walterboro	STATE TOTAL
PART A. NUMBER OF FIRES								
1. No. Willful and Malicious Fires	40	145	43	11	27	7	10	283
2. No. Intentional Fires	92	317	395	7	72	19	292	1,194
3. No. Careless and Negligent Fires	276	405	439	165	365	328	486	2,464
4. Total Fires with Fire Law Violations .	408	867	877	183	464	354	788	3,941
5. No. Fires with No Fire Law Violations	171	310	65	130	195	107	69	1,047
6. Total No. All Fires	579	1,177	942	313	659	461	857	4,988
PART B. PROSECUTIONS								
1. No. Prosecutions (16-317) .....	..	1	..	1	2	..	..	4
2. No. Prosecutions (16-318)	31	43	5	15	26	16	17	153
3. No. Prosecutions Other Violations	1	4	..	2	4	2	10	23
4. Total No. Prosecutions	32	48	5	18	32	18	27	180
PART C. CONVICTIONS								
1. No. Convictions (16-317) .....	..	..	..	1	2	..	..	3
2. No. Convictions (16-318)	31	42	4	13	25	16	17	148
3. No. Convictions Other Violations	1	4	..	2	4	2	10	23
4. Total No. Convictions	32	46	4	16	31	18	27	174

TREE SEEDLING DISTRIBUTION BY LAND CLASSIFICATION 1966-67

A. STATE NURSERIES SOURCE

<i>Land Ownership</i>	<i>Percent of Total</i>	<i>No. Trees Planted</i>
Farmers	47.3	22,853,267
Other Individuals	13.0	6,275,025
Associations & Clubs .....	.3	181,000
Lumber Companies	4.0	1,902,667
Pulp & Paper Companies	22.9	11,141,500
Other Industry	7.3	3,541,400
Schools .....	.6	308,400
State Forests	1.7	871,100
Other State Lands .....	.2	134,000
Cities, Towns, Counties .....	.1	76,000
Federal Government	2.6	1,290,831
Total	100.0	48,575,190

B. OTHER SOURCE SEEDLINGS PLANTED IN THE STATE

Catawba Timber Company	3,699,500
Continental Can Company	1,664,000
Union Camp Corporation	2,481,400
U. S. Forest Service	1,842,000
West Virginia Pulp & Paper Company	11,051,000
Williams Furniture Company	284,500
Total	21,022,400
GRAND TOTAL SEEDLINGS PLANTED IN THE STATE	69,597,590

C. DIRECT SEEDING

	<i>Acres</i>
Catawba Timber Company	3
International Paper Company	1,913
Lightsey Brothers	200
U. S. Atomic Energy Commission	3,000
U. S. Forest Service	1,193
Total	6,309

SEEDLING DISTRIBUTION FROM STATE NURSERIES AND OTHER SOURCES BY COUNTIES, SPECIES AND AMOUNTS 1966-67

COUNTY	Loblolly Pine	Slash Pine	Longleaf Pine	White Pine	Red-cedar	Yellow-Poplar	Miscellaneous Species	Total	Direct Seed-ing Acres
Abbeville	1,843,750	10,000	...	5,500	3,000	22,000	3,600	1,887,850	221
Aiken	294,900	2,344,900	60,000	10,500	15,500	...	32,500	2,758,300	3,000
Allendale	130,000	267,000	5,500	...	...	...	6,000	409,000	...
Anderson	603,250	50,500	5,500	98,850	24,050	17,900	28,000	828,050	...
Bamberg	297,500	100,500	1,000	...	...	...	500	399,500	...
Barnwell	11,000	259,000	5,000	1,000	1,000	1,000	3,000	281,000	...
Beaufort	3,030	292,500	3,000	...	2,500	...	3,750	304,750	...
Berkeley	1,709,684	708,500	34,753	500	1,500	500	22,494	2,477,931	225
Calhoun	158,500	832,000	10,000	500	...	...	1,000	1,002,000	...
Charleston	464,100	88,000	3,000	500	1,000	...	14,000	570,600	708
Cherokee	508,900	35,500	10,500	10,000	7,500	11,000	3,000	586,400	...
Chester	1,493,650	4,500	2,500	4,500	6,500	1,000	5,000	1,517,650	...
Chesterfield	296,200	1,928,500	424,000	2,000	8,000	2,000	9,500	2,670,200	...
Clarendon	463,500	1,039,000	20,000	...	2,500	...	128,000	1,653,000	...
Colleton	935,117	589,500	15,000	2,500	3,500	...	204,500	1,750,117	200
Darlington	103,500	260,500	45,500	4,500	1,500	...	17,000	432,500	...
Dillon	385,800	61,500	10,500	1,000	9,500	1,000	11,000	480,300	...
Dorchester	890,200	355,000	10,000	500	...	10,000	3,500	1,269,200	...
Edgefield	1,218,000	261,000	1,500	1,500	2,500	...	500	1,485,000	...
Fairfield	1,608,500	123,000	1,000	1,000	3,000	2,000	3,500	1,742,000	124
Florence	137,500	415,000	41,000	1,000	5,100	500	2,000	602,100	...
Georgetown	1,868,000	180,000	4,500	500	1,500	...	5,000	2,069,500	...
Greenville	297,200	13,500	3,750	52,500	6,500	5,500	10,500	389,450	...
Greenwood	1,782,800	4,000	3,000	10,000	2,500	23,000	5,500	1,830,800	115
Hampton	721,000	1,096,900	52,500	...	500	1,000	3,000	1,875,900	...
Horry	1,107,000	731,500	46,000	2,000	5,000	15,000	500	1,907,000	...
Jasper	722,000	1,388,700	35,000	1,000	500	...	500	2,147,700	...
Kershaw	2,290,700	3,687,500	224,000	1,500	2,500	...	51,500	6,257,700	...
Lancaster	1,810,250	72,500	5,000	2,500	2,500	15,000	4,000	1,911,750	...
Laurens	2,944,600	87,000	1,000	15,000	1,000	1,000	28,250	3,077,850	102
Lee	304,500	392,000	19,000	1,000	...	...	500	717,000	...
Lexington	105,500	1,933,750	30,750	1,500	6,500	1,000	5,700	2,084,700	...

Marion	364,200	123,000	6,500	500	.....	93,400	587,600	....
Marlboro	550,500	384,000	6,000	1,500	.....	5,000	950,500	....
McCormick	1,288,300	10,500	.....	.....	.....	1,500	1,302,800	433
Newberry	1,823,800	30,000	.....	.....	.....	7,000	1,881,300	104
Geonee	708,250	5,500	.....	.....	.....	10,700	808,200	40
Orangeburg	197,150	1,545,800	1,100	70,400	.....	8,000	12,800	....
Pickens	329,750	4,000	1,500	90,900	.....	5,350	1,832,800	....
Richland	338,900	926,850	29,250	1,500	.....	11,700	451,500	....
Saluda	1,375,900	126,000	1,000	7,000	.....	3,500	1,319,700	....
Spartanburg	1,090,800	16,250	19,700	54,250	.....	12,750	1,515,900	150
Sumter	537,900	402,000	187,600	1,500	.....	25,600	1,210,450	....
Union	1,998,800	4,000	800	9,000	.....	3,000	1,165,900	....
Williamsburg	1,764,167	241,000	14,000	2,900	.....	42,225	2,061,025	612
York	1,571,300	1,000	4,500	7,000	.....	2,000	2,026,667	....
Out-of-state	294,000	921,400	3,750	142,500	.....	5,500	1,594,300	....
TOTAL	41,743,818	24,354,550	1,460,003	631,900	.....	224,750	69,597,590	6,309

MISCELLANEOUS SPECIES

Scotch Pine	38,200	Sycamore .....	.....	.....	.....	47,400
Arizona Cypress	165,250	Tupelo .....	.....	.....	.....	209,500
Shorleaf	11,094	Black Gum .....	.....	.....	.....	70,500
Black Walnut	23,425	Green Ash .....	.....	.....	.....	90,000
Virginia Pine	76,300	Cottonwood .....	.....	.....	.....	15,000
Sweetgum	115,750	Misc Hardwoods .....	.....	.....	.....	40,000

DIRECT SEEDING

Loblolly	2,468
Longleaf	3,838
Yellow-Poplar	2

CUMULATIVE TREE PLANTING RECORD AND PLANTING NEEDS

COUNTY	Seedlings Planted 1929-66	Seedlings Planted 1966-67	Grand Total Planted to Date	Acres Planted Through June 30, 1967	Acres in Need of Planting as of June 30, 1967
Abbeville	22,689,562	1,887,850	24,577,412	24,577	168,585
Aiken	134,954,579	2,758,300	137,712,879	137,683	233,954
Allendale	43,436,095	409,000	43,845,095	43,845	43,436
Anderson	30,030,749	828,050	30,858,799	30,859	190,313
Bamberg	26,955,600	399,500	27,355,100	27,355	37,235
Barnwell	73,870,570	281,000	74,151,570	74,152	62,391
Beaufort	10,170,345	304,750	10,475,095	10,475	51,593
Berkeley	35,286,785	2,477,931	37,764,716	37,765	98,429
Calhoun	14,719,345	1,002,000	15,721,345	15,721	45,752
Charleston	7,660,890	570,600	8,231,490	8,231	65,924
Cherokee	14,879,329	586,400	15,465,729	15,466	121,631
Chester	28,542,535	1,517,650	30,060,185	30,060	141,679
Chesterfield	78,609,365	2,670,200	81,279,565	81,280	149,387
Clarendon	22,037,275	1,653,000	23,690,275	23,690	22,914
Colleton	43,164,724	1,750,117	44,914,841	44,915	104,695
Darlington	14,576,130	432,500	15,008,630	15,009	67,416
Dillon	8,799,165	480,300	9,279,465	9,279	29,834
Dorchester	26,943,495	1,269,200	28,212,695	28,213	77,328
Edgefield	19,326,638	1,485,000	20,811,638	20,812	49,792
Fairfield	23,391,219	1,742,000	25,133,219	25,133	126,567
Florence	7,728,308	602,100	8,330,408	8,330	51,265
Georgetown	25,507,600	2,059,500	27,567,100	27,567	82,382
Greenville	17,580,519	389,450	17,969,969	17,970	202,707
Greenwood	22,206,657	1,830,800	24,037,457	24,037	52,728
Hampton	38,147,015	1,875,900	40,022,915	40,023	75,485
Horry	23,945,295	1,907,000	25,852,295	25,852	135,322
Jasper	36,257,280	2,147,700	38,404,980	38,405	52,877
Kershaw	99,925,227	6,257,700	106,182,927	106,183	129,047
Lancaster	28,113,703	1,911,750	30,025,453	30,025	111,282
Laurens	39,370,759	3,077,850	42,448,609	42,449	135,371
Lee	13,280,915	717,000	13,997,915	13,998	57,444
Lexington	35,935,210	2,084,700	38,019,910	38,020	147,590
Marion	9,217,555	587,600	9,805,155	9,805	12,958
Marlboro	22,332,410	950,500	23,282,910	23,283	10,472
McCormick	11,121,975	1,302,800	12,424,775	12,425	76,520
Newberry	24,825,523	1,881,300	26,706,823	26,707	85,403
Oconee	17,863,338	808,200	18,671,538	18,672	236,205
Orangeburg	50,041,465	1,832,800	51,874,265	51,874	48,401
Pickens	15,531,940	451,500	15,983,440	15,983	183,062
Richland	35,831,675	1,319,700	37,151,375	37,151	121,295
Saluda	9,303,471	1,515,900	10,819,371	10,819	44,206
Spartanburg	34,304,999	1,210,450	35,515,449	35,515	196,135
Sumter	41,518,002	1,165,900	42,683,902	42,684	49,478
Union	24,469,024	2,061,025	27,530,049	27,530	126,472
Williamsburg	16,987,625	2,026,667	19,014,292	19,014	60,416
York	31,823,996	1,594,300	33,418,296	33,418	190,589
Out-of-State	3,571,648	1,522,150	5,093,798	.....	.....
TOTAL	1,417,787,529	69,597,590	1,487,385,119	1,482,259	4,563,967

